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Db    145 NKIDLAPYVGADLKVMERDSKKIAAKSPLF 174


RESULT   2
US-08-472-285-6
; Sequence 6, Application US/08472285
; Patent No. 6027878
;  GENERAL INFORMATION:
;    APPLICANT:  LABIGNE, AGNES
;    APPLICANT:  CUSSAC, VALERIE
;    APPLICANT:  FERRERO, RICHARD
;    TITLE OF INVENTION:  GENES OF HELCIOBACTER PYLORI NECESSARY
;    TITLE OF INVENTION:  FOR THE REGULATION AND MATURATION OF UREASE AND THEIR USE
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,
;      ADDRESSEE:  P.C.
;      STREET:  1755 S. Jefferson Davis Highway, Suite 400
;      CITY:  Arlington
;      STATE:  Virginia
;      COUNTRY:  U.S.A.
;      ZIP:  22202
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/472,285
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/211,312
;      FILING DATE:  01-JUL-1994
;      APPLICATION NUMBER:  FR 91 12198
;      FILING DATE:  03-OCT-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/FR92/00921
;      FILING DATE:  02-OCT-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Oblon, No. 6027878man F.
;      REGISTRATION NUMBER:  24,618
;      REFERENCE/DOCKET NUMBER:  660-075-0XPCT
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 413-3000
;      TELEFAX:  (703) 413-2220
;      TELEX:  248855 OPAT UR
;  INFORMATION FOR SEQ ID NO:  6:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  199 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-472-285-6


  Query Match             24.9%;  Score 52;  DB 3;  Length 199;
  Best Local Similarity   40.0%;  Pred. No. 3.1;
  Matches   12;  Conservative    6;  Mismatches   10;  Indels    2;  Gaps    1;

Qy      6 NSADAQPYVGA--KIGQVDAKQINGKNTAY 33
          |  |  |||||  |: : |:|:|  |:  :
Db    145 NKIDLAPYVGADLKVMERDSKKIAAKSPLF 174


RESULT   3
US-08-472-929-6
; Sequence 6, Application US/08472929
; Patent No. 6271017
;  GENERAL INFORMATION:
;    APPLICANT:  LABIGNE, AGNES
;    APPLICANT:  CUSSAC, VALERIE
;    APPLICANT:  FERRERO, RICHARD
;    TITLE OF INVENTION:  GENES OF HELCIOBACTER PYLORI NECESSARY
;    TITLE OF INVENTION:  FOR THE REGULATION AND MATURATION OF UREASE AND THEIR USE
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,
;      ADDRESSEE:  P.C.
;      STREET:  1755 S. Jefferson Davis Highway, Suite 400
;      CITY:  Arlington
;      STATE:  Virginia
;      COUNTRY:  U.S.A.
;      ZIP:  22202
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
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;      APPLICATION NUMBER:  US/08/472,929
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/211,312
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/FR92/00921
;      FILING DATE:  02-OCT-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Oblon, No. 6271017man F.
;      REGISTRATION NUMBER:  24,618
;      REFERENCE/DOCKET NUMBER:  660-075-0XPCT
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 413-3000
;      TELEFAX:  (703) 413-2220
;      TELEX:  248855 OPAT UR
;  INFORMATION FOR SEQ ID NO:  6:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  199 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-472-929-6


  Query Match             24.9%;  Score 52;  DB 4;  Length 199;
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Db    145 NKIDLAPYVGADLKVMERDSKKIAAKSPLF 174


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; Sequence 4, Application US/08699103B
; Patent No. 6107462
;  GENERAL INFORMATION:
;    APPLICANT:  Rine, Jasper D.
;    APPLICANT:  Hampton, Randolph
;    TITLE OF INVENTION:  GENES AND PROTEINS CONTROLLING
;    TITLE OF INVENTION:  CHOLESTEROL SYNTHESIS
;    NUMBER OF SEQUENCES:  25
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  2200 Sand Hill Road, Suite 100
;      CITY:  Menlo Park
```

GenCore version 4.5


OM protein - protein search, using sw model

Run on: August 7, 2002, 17:09:39 ; Search time 20.67 Seconds
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Scoring table: BLOSUM62
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Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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| 6 | 49.5 | 23.7 | 1203 | 4 | US-09-351-200-2 | Sequence 2, Appli |
| 7 | 48.5 | 23.2 | 1156 | 4 | US-09-001-982-10 | Sequence 10, Appl |
| 8 | 48.5 | 23.2 | 1242 | 4 | US-09-001-982-12 | Sequence 12, Appl |
| 9 | 48 | 23.0 | 532 | 3 | US-08-911-321-11 | Sequence 11, Appl |
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| 20 | 46 | 22.0 | 1296 | 3 | US-08-471-491-3 | Sequence 3, Appli |
| 21 | 46 | 22.0 | 1296 | 4 | US-08-466-662-3 | Sequence 3, Appli |
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| 23 | 45.5 | 21.8 | 251 | 1 | US-08-458-298-8 | Sequence 8, Appli |
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| 25 | 45.5 | 21.8 | 407 | 4 | US-08-861-774E-28 | Sequence 28, Appl |
| 26 | 45.5 | 21.8 | 592 | 4 | US-08-961-083-222 | Sequence 222, App |
| 27 | 45.5 | 21.8 | 2233 | 2 | US-08-569-853-1 | Sequence 1, Appli |
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| 29 | 45.5 | 21.8 | 2233 | 3 | US-08-987-439-1 | Sequence 1, Appli |
| 30 | 45 | 21.5 | 462 | 2 | US-08-865-597A-2 | Sequence 2, Appli |
| 31 | 45 | 21.5 | 626 | 2 | US-08-956-242-2 | Sequence 2, Appli |
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| 33 | 45 | 21.5 | 968 | 1 | US-08-426-236-2 | Sequence 2, Appli |
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| 37 | 44.5 | 21.3 | 359 | 1 | US-08-457-997B-2 | Sequence 2, Appli |
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| 40 | 44 | 21.1 | 32 | 1 | US-08-446-692-21 | Sequence 21, Appl |
| 41 | 44 | 21.1 | 32 | 2 | US-08-488-351A-21 | Sequence 21, Appl |
| 42 | 44 | 21.1 | 74 | 2 | US-08-343-443B-11 | Sequence 11, Appl |
| 43 | 44 | 21.1 | 198 | 2 | US-08-943-915-33 | Sequence 33, Appl |
| 44 | 44 | 21.1 | 207 | 2 | US-08-943-915-2 | Sequence 2, Appli |
| 45 | 44 | 21.1 | 207 | 2 | US-08-943-915-5 | Sequence 5, Appli |

ALIGNMENTS

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RESULT 1
US-08-211-312-6
; Sequence 6, Application US/08211312
; Patent No. 5986051
; GENERAL INFORMATION:
;   APPLICANT: LABIGNE, AGNES
;   APPLICANT: CUSSAC, VALERIE
;   APPLICANT: FERRERO, RICHARD
;   TITLE OF INVENTION: GENES OF HELCIOBACTER PYLORI NECESSARY
;   TITLE OF INVENTION: FOR THE REGULATION AND MATURATION OF UREASE AND THEIR USE
;   NUMBER OF SEQUENCES: 12
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,
;     ADDRESSEE: P.C.
;     STREET: 1755 S. Jefferson Davis Highway, Suite 400
;     CITY: Arlington
;     STATE: Virginia
;     COUNTRY: U.S.A.
;     ZIP: 22202
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: Floppy disk
;     COMPUTER: IBM PC compatible
;     OPERATING SYSTEM: PC-DOS/MS-DOS
;     SOFTWARE: PatentIn Release #1.0, Version #1.25
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/08/211,312
;     FILING DATE: 01-JUL-1994
;     CLASSIFICATION: 435
;   PRIOR APPLICATION DATA:
;     APPLICATION NUMBER: FR 91 12198
;     FILING DATE: 03-OCT-1991
;   PRIOR APPLICATION DATA:
;     APPLICATION NUMBER: PCT/FR92/00921
;     FILING DATE: 02-OCT-1992
;   ATTORNEY/AGENT INFORMATION:
;     NAME: Oblon, No. 5986051man F.
;     REGISTRATION NUMBER: 24,618
;     REFERENCE/DOCKET NUMBER: 660-075-0XPCT
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE: (703) 413-3000
;     TELEFAX: (703) 413-2220
;     TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 6:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 199 amino acids
;     TYPE: amino acid
;     TOPOLOGY: linear
;   MOLECULE TYPE: protein
US-08-211-312-6
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;       STATE:  CA
;       COUNTRY:  USA
;       ZIP:  94025
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Diskette
;       COMPUTER:  IBM Compatible
;       OPERATING SYSTEM:  DOS
;       SOFTWARE:  FastSEQ for Windows Version 2.0
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/699,103B
;       FILING DATE:  16-AUG-1996
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  60/002,581
;       FILING DATE:  17-AUG-1995
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Green, Grant D.
;       REGISTRATION NUMBER:  31,259
;       REFERENCE/DOCKET NUMBER:  09272/005001
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  650/322-5070
;       TELEFAX:  650/854-0875
;   INFORMATION FOR SEQ ID NO:  4:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  833 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
US-08-699-103B-4


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RESULT   5
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; Sequence 4, Application US/09229059
; Patent No. 6333172
;  GENERAL INFORMATION:
;     APPLICANT:  Rine, Jasper D.
;     APPLICANT:  Hampton, Randolph
;     TITLE OF INVENTION:  GENES AND PROTEINS CONTROLLING
;     TITLE OF INVENTION:  CHOLESTEROL SYNTHESIS
;     NUMBER OF SEQUENCES:  25
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Fish & Richardson P.C.
;       STREET:  2200 Sand Hill Road, Suite 100
;       CITY:  Menlo Park
;       STATE:  CA
;       COUNTRY:  USA
;       ZIP:  94025
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Diskette
;       COMPUTER:  IBM Compatible
;       OPERATING SYSTEM:  DOS
;       SOFTWARE:  FastSEQ for Windows Version 2.0
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/229,059
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/699,103
;       FILING DATE:  16-AUG-1996
;       APPLICATION NUMBER:  60/002,581
;       FILING DATE:  17-AUG-1995
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Green, Grant D.
;       REGISTRATION NUMBER:  31,259
;       REFERENCE/DOCKET NUMBER:  09272/005001
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  650/322-5070
;       TELEFAX:  650/854-0875
;   INFORMATION FOR SEQ ID NO:  4:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  833 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
US-09-229-059-4


  Query Match             23.9%;  Score 50;  DB 4;  Length 833;
  Best Local Similarity   37.8%;  Pred. No. 38;
  Matches   14;  Conservative    7;  Mismatches   10;  Indels    6;  Gaps    2;

Qy       6 NSADAQPYV--GAKIGQVDAKQINGKNTAYGIYAGYN 40
           :|| |  |    |::| : |||:     ||  |:|:|
Db     170 DSAKALLYYQRAAQLGNLKAKQV----LAYKYYSGFN 202


RESULT   6
US-09-351-200-2
; Sequence 2, Application US/09351200
; Patent No. 6320033
; GENERAL INFORMATION:
;  APPLICANT: BOURBONNAIS, Yves
;  APPLICANT: LAMARRE, Claude
;  APPLICANT: DESLAURIERS, No. 6320033la
;  TITLE OF INVENTION: CANDIDA ALBICANS GENE (CSA1) ENCODING A
;  TITLE OF INVENTION: MYCELIAL SURFACE ANTIGEN, AND USES THEREOF
;  FILE REFERENCE: 6013-71"US" CC/
;  CURRENT APPLICATION NUMBER: US/09/351,200
;  CURRENT FILING DATE: 1999-07-09
;  EARLIER APPLICATION NUMBER: CA2,237,134
;  EARLIER FILING DATE: 1998-07-10
;  NUMBER OF SEQ ID NOS: 4
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
;   LENGTH: 1203
;   TYPE: PRT
;   ORGANISM: Candida albicans
;   FEATURE:
;   NAME/KEY: PEPTIDE
;   LOCATION: (0)...(0)
US-09-351-200-2


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  Best Local Similarity   48.3%;  Pred. No. 72;
  Matches   14;  Conservative    0;  Mismatches   12;  Indels    3;  Gaps    1;

Qy       3 SYGNSADAQPYVGAKIGQVDAKQINGKNT 31
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Db     951 SYGNSTIAQPSTSTK---SDAASITGPIT 976


RESULT   7
US-09-001-982-10
; Sequence 10, Application US/09001982
; Patent No. 6204246
;  GENERAL INFORMATION:
;     APPLICANT:  Bosch, Hendrick J.
;     APPLICANT:  Stiekema, Willem J.
;     TITLE OF INVENTION:  Hybrid Toxin
;     NUMBER OF SEQUENCES:  15
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  No. 6204246artis Corporation
;       STREET:  3054 Cornwallis Road
;       CITY:  Research Triangle Park
;       STATE:  NC
;       COUNTRY:  USA
;       ZIP:  27709
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;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
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;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/602,737
;      FILING DATE:  21-FEB-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Meigs, J. Timothy
;      REGISTRATION NUMBER:  38,241
;      REFERENCE/DOCKET NUMBER:  130-4080/PCT/CIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  919-541-8587
;      TELEFAX:  919-541-8689
;  INFORMATION FOR SEQ ID NO:  10:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1156 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-001-982-10


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RESULT   8
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; Sequence 12, Application US/09001982
; Patent No. 6204246
;  GENERAL INFORMATION:
;    APPLICANT:  Bosch, Hendrick J.
;    APPLICANT:  Stiekema, Willem J.
;    TITLE OF INVENTION:  Hybrid Toxin
;    NUMBER OF SEQUENCES:  15
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  No. 6204246artis Corporation
;      STREET:  3054 Cornwallis Road
;      CITY:  Research Triangle Park
;      STATE:  NC
;      COUNTRY:  USA
;      ZIP:  27709
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
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;      APPLICATION NUMBER:  US/09/001,982
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/602,737
;      FILING DATE:  21-FEB-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Meigs, J. Timothy
;      REGISTRATION NUMBER:  38,241
;      REFERENCE/DOCKET NUMBER:  130-4080/PCT/CIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  919-541-8587
;      TELEFAX:  919-541-8689
;  INFORMATION FOR SEQ ID NO:  12:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1242 amino acids
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;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-001-982-12


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  Matches   14;  Conservative    8;  Mismatches   16;  Indels   17;  Gaps    1;

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RESULT   9
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; Sequence 11, Application US/08911321
; Patent No. 6010703
;  GENERAL INFORMATION:
;    APPLICANT:  Roger K. Maes and Stephen J. Spatz
;    TITLE OF INVENTION:  Recombinant Poxvirus
;    TITLE OF INVENTION:  Vaccine Against
;    TITLE OF INVENTION:  Feline Rhinotracheitis
;    NUMBER OF SEQUENCES:  11
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Ian C. McLeod
;      STREET:  2190  Commons Parkway
;      CITY:  Okemos
;      STATE:  Michigan
;      COUNTRY:  USA
;      ZIP:  48864
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 5.25 inch, 360 Kb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Wordperfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/911,321
;      FILING DATE:
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/096,183
;      FILING DATE:  July 26, 1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Ian C. McLeod
;      REGISTRATION NUMBER:  20,931
;      REFERENCE/DOCKET NUMBER:  MSU 4.1-166
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (517) 347-4100
;      TELEFAX:  (517) 347-4103
;      TELEX:  No. 6010703e
;  INFORMATION FOR SEQ ID NO:  11:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  532
;      TYPE:  Amino Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    MOLECULE TYPE:
;      DESCRIPTION:  Polypeptide
;    HYPOTHETICAL:  No
;    ANTI-SENSE:  No
;    ORIGINAL SOURCE:
;      ORGANISM:  Feline herpesvirus-1
;      STRAIN:  1
;      INDIVIDUAL ISOLATE:  C-27
;      CELL TYPE:  N/A
;    FEATURE:
;      NAME/KEY:
;      LOCATION:
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;      IDENTIFICATION METHOD:  Deduced Sequence
;      OTHER INFORMATION:  gE
US-08-911-321-11


  Query Match             23.0%;  Score 48;  DB 3;  Length 532;
  Best Local Similarity   36.7%;  Pred. No. 43;
  Matches   11;  Conservative    3;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       7 SADAQPYVGAKIGQVDAKQINGKNTAYGIY 36
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Db     299 SINHMPYIEQPANNVDLKFINVPTNASGLY 328


RESULT  10
PCT-US95-13975-2
; Sequence 2, Application PC/TUS9513975
;  GENERAL INFORMATION:
;    APPLICANT:  Cochran, Mark D.
;    APPLICANT:  McDonell, Michael W.
;    TITLE OF INVENTION:  Recombinant Feline Herpes virus
;    NUMBER OF SEQUENCES:  73
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  John P. White
;      STREET:  1185 Avenue of the Americas
;      CITY:  New York
;      STATE:  New York
;      COUNTRY:  USA
;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM 330 466 DX2
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/13975
;      FILING DATE:  26-OCT-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/329,883
;      FILING DATE:  26-OCT-1994
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  White, John P.
;      REGISTRATION NUMBER:  28,678
;      REFERENCE/DOCKET NUMBER:  39118-PCT
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212)278-0400
;      TELEFAX:  (212)391-0525
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  532 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
PCT-US95-13975-2


  Query Match             23.0%;  Score 48;  DB 5;  Length 532;
  Best Local Similarity   36.7%;  Pred. No. 43;
  Matches   11;  Conservative    3;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       7 SADAQPYVGAKIGQVDAKQINGKNTAYGIY 36
           | :  ||:      || | ||    | |:|
Db     299 SINHMPYIEQPANNVDLKFINVPTNASGLY 328


RESULT  11
US-08-852-401-4
; Sequence 4, Application US/08852401
; Patent No. 5976836
;  GENERAL INFORMATION:
;    APPLICANT:  Weber, J. Mark
;    APPLICANT:  Hessler, Paul E.
;    APPLICANT:  Larsen, Peter E.
;    APPLICANT:  Luu, B. Minh
;    TITLE OF INVENTION:  Methods and Compositions for Enhancing
;    TITLE OF INVENTION:  Erythromycin Production
;    NUMBER OF SEQUENCES:  5
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Rockey, Milnamow & Katz, Ltd.
;      STREET:  2 Prudential Plaza, 180 N. Stetson, Suite
;      STREET:  4700
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  U.S.A.
;      ZIP:  60601
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/852,401
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Mueller, Lisa L.
;      REGISTRATION NUMBER:  38,978
;      REFERENCE/DOCKET NUMBER:  FER2159POO30US
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312-616-5400
;      TELEFAX:  312-616-5460
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  283 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-852-401-4


  Query Match             22.7%;  Score 47.5;  DB 2;  Length 283;
  Best Local Similarity   27.5%;  Pred. No. 23;
  Matches   11;  Conservative    5;  Mismatches   19;  Indels    5;  Gaps    1;

Qy       6 NSADAQPYV-----GAKIGQVDAKQINGKNTAYGIYAGYN 40
           |:    ||       ||    :| : : |  | | :|   |
Db     172 NNCSGNPYTPTEVCGAGYSVIDQQALGGAGTTYLLYNASN 211


RESULT  12
US-09-300-909-19
; Sequence 19, Application US/09300909
; Patent No. 6306580
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  PREPARATION OF HUMAN PAPILLOMAVIRUS E1 HAVING
;    TITLE OF INVENTION:  HELICASE ACTIVITY AND METHOD THEREFOR
;    NUMBER OF SEQUENCES:  27
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/300,909
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 60/083,942
;      FILING DATE:  01-MAY-1998
;  INFORMATION FOR SEQ ID NO:  19:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  629 amino acids
;      TYPE:  amino acid
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;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-300-909-19


  Query Match             22.7%;  Score 47.5;  DB 4;  Length 629;
  Best Local Similarity   50.0%;  Pred. No. 63;
  Matches   12;  Conservative    1;  Mismatches    8;  Indels    3;  Gaps    1;

Qy       2 ISYGNSAD---AQPYVGAKIGQVD 22
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Db     479 ISYANSKSHFWLQPLADAKIGMLD 502


RESULT  13
US-08-858-207A-510
; Sequence 510, Application US/08858207A
; Patent No. 6348328
;  GENERAL INFORMATION:
;    APPLICANT:  Black, Michael
;    APPLICANT:  Hodgson, John
;    APPLICANT:  Knowles, David
;    APPLICANT:  Nicholas, Richard
;    APPLICANT:  Stodola, Robert
;    TITLE OF INVENTION:  No. 6348328el Compounds
;    NUMBER OF SEQUENCES:  552
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SmithKline Beecham Corporation
;      STREET:  709 Swedeland Road
;      CITY:  King of Prussia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19406-0939
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/858,207A
;      FILING DATE:  09-MAY-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/017670
;      FILING DATE:  14-MAY-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Gimmi, Edward R
;      REGISTRATION NUMBER:  38,891
;      REFERENCE/DOCKET NUMBER:  P50475
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  610-270-4478
;      TELEFAX:  610-270-5090
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  510:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  165 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  No. 6348328e
US-08-858-207A-510


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  Best Local Similarity   28.6%;  Pred. No. 20;
  Matches   14;  Conservative    5;  Mismatches   16;  Indels   14;  Gaps    2;

Qy       6 NSADAQPY----------VGAKIGQV----DAKQINGKNTAYGIYAGYN 40
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Db      80 NSKDAREYDLALLILEEPIGAKLGTLGLPTSQKNLTGITVTITGYPSYN 128
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RESULT  14
US-08-431-560-1
; Sequence 1, Application US/08431560
; Patent No. 5620855
;  GENERAL INFORMATION:
;    APPLICANT:  Anne H. Dantzig, et al.
;    TITLE OF INVENTION:  Mammalian Influx Peptide
;    TITLE OF INVENTION:  Transporter
;    NUMBER OF SEQUENCES:  2
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Eli Lilly and Company
;      STREET:  Lilly Corporate Center
;      CITY:  Indianapolis
;      STATE:  IN
;      COUNTRY:  U.S.A.
;      ZIP:  46285
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.50 inch, 1.0 Mb storage
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  Macintosh
;      SOFTWARE:  Microsoft Word
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/431,560
;      FILING DATE:  01-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/013,462
;      FILING DATE:  04-FEB-1993
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  832 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-431-560-1


  Query Match             22.0%;  Score 46;  DB 1;  Length 832;
  Best Local Similarity   36.4%;  Pred. No. 1.5e+02;
  Matches    8;  Conservative    5;  Mismatches    9;  Indels    0;  Gaps    0;

Qy      14 VGAKIGQVDAKQINGKNTAYGI 35
             :| |:| | ||   | : :| :
Db     581 IGTKVGNVTAKDPEGLDISYSL 602


RESULT  15
US-08-463-345-1
; Sequence 1, Application US/08463345
; Patent No. 5710018
;  GENERAL INFORMATION:
;    APPLICANT:  Anne H. Dantzig, et al.
;    TITLE OF INVENTION:  Mammalian Influx Peptide
;    TITLE OF INVENTION:  Transporter
;    NUMBER OF SEQUENCES:  2
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Eli Lilly and Company
;      STREET:  Lilly Corporate Center
;      CITY:  Indianapolis
;      STATE:  IN
;      COUNTRY:  U.S.A.
;      ZIP:  46285
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.50 inch, 1.0 Mb storage
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  Macintosh
;      SOFTWARE:  Microsoft Word
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/463,345
;      FILING DATE:  05-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/013,462
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;  FILING DATE: 04-FEB-1993
;  INFORMATION FOR SEQ ID NO: 1:
;  SEQUENCE CHARACTERISTICS:
;  LENGTH: 832 amino acids
;  TYPE: amino acid
;  TOPOLOGY: linear
;  MOLECULE TYPE: protein
US-08-463-345-1

Query Match 22.0%; Score 46; DB 1; Length 832;
Best Local Similarity 36.4%; Pred. No. 1.5e+02;
Matches 8; Conservative 5; Mismatches 9; Indels 0; Gaps 0;

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Qy      14 VGAKIGQVDAKQINGKNTAYGI 35
           :| |:| | ||   | : :| :
Db     581 IGTKVGNVTAKDPEGLDISYSL 602
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Search completed: August 7, 2002, 17:10:09
Job time: 30 sec

GenCore version 4.5


OM nucleic - nucleic search, using sw model

Run on: August 8, 2002, 18:04:22 ; Search time 77.73 Seconds
(without alignments)
1715.927 Million cell updates/sec

Title: US-09-164-714-6
Perfect score: 543
Sequence: 1 atgaaaactttaaaaacact.....gcgctcatttggctttttaa 543

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
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2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | Result No. | Score | % Query Match | Length | DB | ID | Description |
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| | 2 | 39.4 | 7.3 | 891 | 1 | US-07-941-523-19 | Sequence 19, Appl |
| | 3 | 39.4 | 7.3 | 891 | 4 | US-08-235-836C-21 | Sequence 21, Appl |
| | 4 | 39.4 | 7.3 | 1141 | 4 | US-08-235-836C-117 | Sequence 117, App |
| | 5 | 39.4 | 7.3 | 1180 | 4 | US-08-235-836C-113 | Sequence 113, App |
| | 6 | 39.4 | 7.3 | 1324 | 4 | US-08-235-836C-119 | Sequence 119, App |
| | 7 | 39.4 | 7.3 | 1363 | 4 | US-08-235-836C-115 | Sequence 115, App |
| | 8 | 39.4 | 7.3 | 1765 | 4 | US-08-235-836C-121 | Sequence 121, App |
| | 9 | 39.4 | 7.3 | 1959 | 1 | US-08-137-175A-1 | Sequence 1, Appli |
| | 10 | 39.4 | 7.3 | 1959 | 3 | US-08-479-017-1 | Sequence 1, Appli |
| | 11 | 39.4 | 7.3 | 5952 | 2 | US-08-663-998-2 | Sequence 2, Appli |
| | 12 | 38.4 | 7.1 | 3323 | 4 | US-08-936-165A-246 | Sequence 246, App |
| | 13 | 34.6 | 6.4 | 3465 | 4 | US-08-914-999-5 | Sequence 5, Appli |
| c | 14 | 31.8 | 5.9 | 730 | 4 | US-08-858-207A-234 | Sequence 234, App |
| | 15 | 31 | 5.7 | 1197 | 4 | US-09-276-531-85 | Sequence 85, Appl |
| | 16 | 31 | 5.7 | 2696 | 1 | US-07-961-522-1 | Sequence 1, Appli |
| | 17 | 31 | 5.7 | 2696 | 1 | US-08-217-438-1 | Sequence 1, Appli |
| | 18 | 31 | 5.7 | 2696 | 1 | US-08-321-978-1 | Sequence 1, Appli |
| | 19 | 31 | 5.7 | 2696 | 2 | US-08-710-584-1 | Sequence 1, Appli |
| | 20 | 31 | 5.7 | 246240 | 2 | US-08-724-394A-20 | Sequence 20, Appl |
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| | 22 | 31 | 5.7 | 246240 | 2 | US-08-724-394A-22 | Sequence 22, Appl |
| | 23 | 30.8 | 5.7 | 2520 | 2 | US-08-450-351-1 | Sequence 1, Appli |
| | 24 | 30.8 | 5.7 | 2520 | 2 | US-08-450-351-3 | Sequence 3, Appli |
| | 25 | 30.8 | 5.7 | 3762 | 3 | US-08-772-270A-3 | Sequence 3, Appli |
| | 26 | 30.8 | 5.7 | 4042 | 1 | US-08-200-232-1 | Sequence 1, Appli |
| | 27 | 30.8 | 5.7 | 4042 | 5 | PCT-US95-02219-1 | Sequence 1, Appli |
| | 28 | 30.8 | 5.7 | 4042 | 5 | PCT-US95-02219A-1 | Sequence 1, Appli |
| | 29 | 30.8 | 5.7 | 8370 | 2 | US-08-488-706-1 | Sequence 1, Appli |
| | 30 | 30.6 | 5.6 | 2278 | 1 | US-08-258-188-1 | Sequence 1, Appli |
| | 31 | 30.6 | 5.6 | 2278 | 1 | US-08-526-813-1 | Sequence 1, Appli |
| | 32 | 30.6 | 5.6 | 2278 | 5 | PCT-US95-08554-1 | Sequence 1, Appli |
| | 33 | 30.6 | 5.6 | 2472 | 4 | US-08-743-168B-35 | Sequence 35, Appl |
| c | 34 | 30.6 | 5.6 | 2472 | 4 | US-08-743-168B-37 | Sequence 37, Appl |
| c | 35 | 30.6 | 5.6 | 3291 | 4 | US-09-318-448-12 | Sequence 12, Appl |
| | 36 | 30.2 | 5.6 | 939 | 4 | US-08-881-189B-1 | Sequence 1, Appli |
| | 37 | 30.2 | 5.6 | 994 | 3 | US-08-961-083-211 | Sequence 211, App |
| | 38 | 30.2 | 5.6 | 1005 | 4 | US-08-881-189B-22 | Sequence 22, Appl |
| | 39 | 30.2 | 5.6 | 1033 | 3 | US-08-961-083-191 | Sequence 191, App |
| | 40 | 30.2 | 5.6 | 1283 | 4 | US-09-282-305-11 | Sequence 11, Appl |
| c | 41 | 30.2 | 5.6 | 152331 | 3 | US-09-128-155-16 | Sequence 16, Appl |
| c | 42 | 30.2 | 5.6 | 176373 | 3 | US-09-128-155-17 | Sequence 17, Appl |
| | 43 | 29.8 | 5.5 | 1903 | 1 | US-07-961-522-3 | Sequence 3, Appli |
| | 44 | 29.8 | 5.5 | 1903 | 1 | US-08-217-438-3 | Sequence 3, Appli |
| | 45 | 29.8 | 5.5 | 1903 | 1 | US-08-321-978-3 | Sequence 3, Appli |

ALIGNMENTS

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RESULT   1
US-07-941-523-21
; Sequence 21, Application US/07941523
; Patent No. 5571718
;  GENERAL INFORMATION:
;    APPLICANT:  Dunn, John J
;    APPLICANT:  Barbour, Alan G
;    TITLE OF INVENTION:  Cloning and Expression of Borrelia
;    TITLE OF INVENTION:  Lipoproteins
;    NUMBER OF SEQUENCES:  24
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Hamilton, Brook, Smith & Reynolds, P.C.
;      STREET:  Two Militia Drive
;      CITY:  Lexington
;      STATE:  Massachusetts
;      COUNTRY:  U.S.A.
;      ZIP:  01730
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/07/941,523
;      FILING DATE:  19920908
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Granahan, Patricia
;      REGISTRATION NUMBER:  32,227
;      REFERENCE/DOCKET NUMBER:  BNL90-01A
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 861-6240
;      TELEFAX:  (617) 861-9540
;  INFORMATION FOR SEQ ID NO:  21:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  846 base pairs
;      TYPE:  NUCLEIC ACID
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-07-941-523-21


  Query Match             7.3%;  Score 39.4;  DB 1;  Length 846;
  Best Local Similarity   48.8%;  Pred. No. 0.0051;
  Matches  106;  Conservative    0;  Mismatches  111;  Indels    0;  Gaps    0;

Qy      33 agcttcttcgttattggcgatgagtgctaacgctgccatcagctatggcaattctgctga 92
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Db    177 CGGCAAATATGATTTAAGAGCAACAATTGATCAGGTTGAACTTAAAGGAACTTCCGATAA 236

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RESULT 2
US-07-941-523-19
; Sequence 19, Application US/07941523
; Patent No. 5571718
; GENERAL INFORMATION:
; APPLICANT: Dunn, John J
; APPLICANT: Barbour, Alan G
; TITLE OF INVENTION: Cloning and Expression of Borrelia
; TITLE OF INVENTION: Lipoproteins
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: U.S.A.
; ZIP: 01730
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/941,523
; FILING DATE: 19920908
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: BNL90-01A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 861-6240
; TELEFAX: (617) 861-9540
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 891 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-07-941-523-19

Query Match 7.3%; Score 39.4; DB 1; Length 891;
Best Local Similarity 48.8%; Pred. No. 0.0052;
Matches 106; Conservative 0; Mismatches 111; Indels 0; Gaps 0;

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          ||  ||   ||  |||   |   ||  |||   |    | ||| | |  ||   |
Db    162 AGACTCAGTGTCTTTGTTTAATGGTAATAAAATTTTTGTAAGCAAAGAAAAAAATAGCTC 221

Qy     93 tgctcaaccctatgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaa 152
          |   ||    || |  | || | ||||| ||| || ||    ||   ||    || |||
Db    222 CGGCAAATATGATTTAAGAGCAACAATTGATCAGGTTGAACTTAAAGGAACTTCCGATAA 281

Qy    153 gaacaccgcttatggtatttatgcaggttataactttgaccaaaattttggcgtagaacc 212
           ||||  | || ||| |    || |||||  ||   |||| | | |   |    |  | |
Db    282 AAACAATGGTTCTGGAACCCTTGAAGGTTCAAAGCCTGACAAGAGTAAAGTAAAATTAAC 341
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Qy    213 cgaatttgttggttcagacgccaaagaatttaatgca 249
          |  | || || || | || |   |   ||  | |||
Db    342 AGTTTCTGCTGATTTAAACACAGTAACCTTAGAAGCA 378
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RESULT 3
US-08-235-836C-21
; Sequence 21, Application US/08235836C
; Patent No. 6248562
; GENERAL INFORMATION:
; APPLICANT: Dunn, John J.
; APPLICANT: Luft, Benjamin J.
; TITLE OF INVENTION: No. 6248562el Chimeric Proteins Comprising
; TITLE OF INVENTION: Borrelia Polypeptides and Uses Therefor
; NUMBER OF SEQUENCES: 144
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Brookhaven National Laboratory
; STREET:
; CITY: Upton
; STATE: NY
; COUNTRY: USA
; ZIP: 11973
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/235,836C
; FILING DATE: 29-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/148,191
; FILING DATE: 01-11-93
; ATTORNEY/AGENT INFORMATION:
; NAME: Bogosian, Margaret C.
; REGISTRATION NUMBER: 25,324
; REFERENCE/DOCKET NUMBER: BNL93-28A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (516) 282-7338
; TELEFAX: (516) 282-3729
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 891 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..891
US-08-235-836C-21

Query Match 7.3%; Score 39.4; DB 4; Length 891;
Best Local Similarity 48.8%; Pred. No. 0.0052;
Matches 106; Conservative 0; Mismatches 111; Indels 0; Gaps 0;

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Qy     33 agcttcttcgttattggcgatgagtgctaacgctgccatcagctatggcaattctgctga 92
          ||  ||   ||  |||   |   ||  |||   |    | ||| | |  ||   |
Db    162 AGACTCAGTGTCTTTGTTTAATGGTAATAAAATTTTTGTAAGCAAAGAAAAAAATAGCTC 221

Qy     93 tgctcaaccctatgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaa 152
          |   ||    || |  | || | ||||| ||| || ||    ||   ||    || |||
Db    222 CGGCAAATATGATTTAAGAGCAACAATTGATCAGGTTGAACTTAAAGGAACTTCCGATAA 281

Qy    153 gaacaccgcttatggtatttatgcaggttataactttgaccaaaattttggcgtagaacc 212
           ||||  | || ||| |    || |||||  ||   |||| | | |   |    |  | |
Db    282 AAACAATGGTTCTGGAACCCTTGAAGGTTCAAAGCCTGACAAGAGTAAAGTAAAATTAAC 341

Qy    213 cgaatttgttggttcagacgccaaagaatttaatgca 249
          |  | || || || | ||  |   |   ||  | |||
Db    342 AGTTTCTGCTGATTTAAACACAGTAACCTTAGAAGCA 378
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RESULT   4
US-08-235-836C-117
; Sequence 117, Application US/08235836C
; Patent No. 6248562
;  GENERAL INFORMATION:
;    APPLICANT:  Dunn, John J.
;    APPLICANT:  Luft, Benjamin J.
;    TITLE OF INVENTION:  No. 6248562el Chimeric Proteins Comprising
;    TITLE OF INVENTION:  Borrelia Polypeptides and Uses Therefor
;    NUMBER OF SEQUENCES:  144
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Brookhaven National Laboratory
;      STREET:
;      CITY:  Upton
;      STATE:  NY
;      COUNTRY:  USA
;      ZIP:  11973
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/235,836C
;      FILING DATE:  29-APR-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/148,191
;      FILING DATE:  01-11-93
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Bogosian, Margaret C.
;      REGISTRATION NUMBER:  25,324
;      REFERENCE/DOCKET NUMBER:  BNL93-28A
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (516) 282-7338
;      TELEFAX:  (516) 282-3729
;  INFORMATION FOR SEQ ID NO:  117:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1141 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..1141
US-08-235-836C-117


  Query Match             7.3%;  Score 39.4;  DB 4;  Length 1141;
  Best Local Similarity   48.8%;  Pred. No. 0.0058;
  Matches  106;  Conservative    0;  Mismatches  111;  Indels    0;  Gaps    0;

Qy      33 agcttcttcgttattggcgatgagtgctaacgctgccatcagctatggcaattctgctga 92
           ||  ||   ||  |||   |   ||  |||   |    | ||| | |  ||   |
Db     114 AGACTCAGTGTCTTTGTTTAATGGTAATAAAATTTTTGTAAGCAAAGAAAAAAATAGCTC 173

Qy      93 tgctcaaccctatgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaa 152
             |   ||    || |  | || | ||||| ||| || ||    ||   ||    || |||
Db     174 CGGCAAATATGATTTAAGAGCAACAATTGATCAGGTTGAACTTAAAGGAACTTCCGATAA 233

Qy     153 gaacaccgcttatggtatttatgcaggttataactttgaccaaaatttttggcgtagaacc 212
            ||||  | || ||| |    || |||||  ||   |||| | | |    |    |  | |
Db     234 AAACAATGGTTCTGGAACCCTTGAAGGTTCAAAGCCTGACAAGAGTAAAGTAAAATTAAC 293

Qy     213 cgaatttgttggttcagacgccaaagaatttaatgca 249
           |  | || || || | || |   |   ||  | |||
Db     294 AGTTTCTGCTGATTTAAACACAGTAACCTTAGAAGCA 330


RESULT   5
US-08-235-836C-113
; Sequence 113, Application US/08235836C
; Patent No. 6248562
;  GENERAL INFORMATION:
;    APPLICANT:  Dunn, John J.
;    APPLICANT:  Luft, Benjamin J.
;    TITLE OF INVENTION:  No. 6248562el Chimeric Proteins Comprising
;    TITLE OF INVENTION:  Borrelia Polypeptides and Uses Therefor
;    NUMBER OF SEQUENCES:  144
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Brookhaven National Laboratory
;      STREET:
;      CITY:  Upton
;      STATE:  NY
;      COUNTRY:  USA
;      ZIP:  11973
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/235,836C
;      FILING DATE:  29-APR-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/148,191
;      FILING DATE:  01-11-93
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Bogosian, Margaret C.
;      REGISTRATION NUMBER:  25,324
;      REFERENCE/DOCKET NUMBER:  BNL93-28A
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (516) 282-7338
;      TELEFAX:  (516) 282-3729
;  INFORMATION FOR SEQ ID NO:  113:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1180 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..1180
US-08-235-836C-113


  Query Match             7.3%;  Score 39.4;  DB 4;  Length 1180;
  Best Local Similarity   48.8%;  Pred. No. 0.0059;
  Matches  106;  Conservative    0;  Mismatches  111;  Indels    0;  Gaps    0;

Qy      33 agcttcttcgttattggcgatgagtgctaacgctgccatcagctatggcaattctgctga 92
           ||  ||   ||  |||   |   ||  |||   |    | ||| | |  ||   |
Db     114 AGACTCAGTGTCTTTGTTTAATGGTAATAAAATTTTTGTAAGCAAAGAAAAAAATAGCTC 173

Qy      93 tgctcaaccctatgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaa 152
             |   ||    || |  | || | ||||| ||| || ||    ||   ||    || |||
Db     174 CGGCAAATATGATTTAAGAGCAACAATTGATCAGGTTGAACTTAAAGGAACTTCCGATAA 233

Qy     153 gaacaccgcttatggtatttatgcaggttataactttgaccaaaatttttggcgtagaacc 212
            ||||  | || ||| |    || |||||  ||   |||| | | |    |    |  | |
Db     234 AAACAATGGTTCTGGAACCCTTGAAGGTTCAAAGCCTGACAAGAGTAAAGTAAAATTAAC 293

Qy     213 cgaatttgttggttcagacgccaaagaatttaatgca 249
           |  | || || || | || |   |   ||  | |||
Db     294 AGTTTCTGCTGATTTAAACACAGTAACCTTAGAAGCA 330


RESULT   6
US-08-235-836C-119
; Sequence 119, Application US/08235836C
; Patent No. 6248562
;  GENERAL INFORMATION:
;    APPLICANT:  Dunn, John J.
```

```
;    APPLICANT:  Luft, Benjamin J.
;    TITLE OF INVENTION:  No. 6248562el Chimeric Proteins Comprising
;    TITLE OF INVENTION:  Borrelia Polypeptides and Uses Therefor
;    NUMBER OF SEQUENCES:  144
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Brookhaven National Laboratory
;      STREET:
;      CITY:  Upton
;      STATE:  NY
;      COUNTRY:  USA
;      ZIP:  11973
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/235,836C
;      FILING DATE:  29-APR-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/148,191
;      FILING DATE:  01-11-93
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Bogosian, Margaret C.
;      REGISTRATION NUMBER:  25,324
;      REFERENCE/DOCKET NUMBER:  BNL93-28A
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (516) 282-7338
;      TELEFAX:  (516) 282-3729
;  INFORMATION FOR SEQ ID NO:  119:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1324 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..1324
US-08-235-836C-119


  Query Match             7.3%;  Score 39.4;  DB 4;  Length 1324;
  Best Local Similarity   48.8%;  Pred. No. 0.0062;
  Matches  106;  Conservative    0;  Mismatches  111;  Indels    0;  Gaps    0;

Qy      33 agcttcttcgttattggcgatgagtgctaacgctgccatcagctatggcaattctgctga 92
           ||  ||   ||  |||   |   ||  |||   |    | ||| | |  ||   |
Db     114 AGACTCAGTGTCTTTGTTTAATGGTAATAAAATTTTTGTAAGCAAAGAAAAAAATAGCTC 173

Qy      93 tgctcaaccctatgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaa 152
             |   ||    || |  | || | ||||| ||| || ||    ||   ||    || |||
Db     174 CGGCAAATATGATTTAAGAGCAACAATTGATCAGGTTGAACTTAAAGGAACTTCCGATAA 233

Qy     153 gaacaccgcttatggtatttatgcaggttataactttgaccaaaattttggcgtagaacc 212
           ||||  | || ||| |    || |||||  ||   |||| | | |    |    |  | |
Db     234 AAACAATGGTTCTGGAACCCTTGAAGGTTCAAAGCCTGACAAGAGTAAAGTAAAATTAAC 293

Qy     213 cgaatttgttggttcagacgccaaagaatttaatgca 249
             |  | || || || | || |   |   ||  | |||
Db     294 AGTTTCTGCTGATTTAAACACAGTAACCTTAGAAGCA 330


RESULT   7
US-08-235-836C-115
; Sequence 115, Application US/08235836C
; Patent No. 6248562
;  GENERAL INFORMATION:
;    APPLICANT:  Dunn, John J.
;    APPLICANT:  Luft, Benjamin J.
;    TITLE OF INVENTION:  No. 6248562el Chimeric Proteins Comprising
;    TITLE OF INVENTION:  Borrelia Polypeptides and Uses Therefor
;    NUMBER OF SEQUENCES:  144
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Brookhaven National Laboratory
;      STREET:
;      CITY:  Upton
;      STATE:  NY
;      COUNTRY:  USA
;      ZIP:  11973
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/235,836C
;      FILING DATE:  29-APR-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/148,191
;      FILING DATE:  01-11-93
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Bogosian, Margaret C.
;      REGISTRATION NUMBER:  25,324
;      REFERENCE/DOCKET NUMBER:  BNL93-28A
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (516) 282-7338
;      TELEFAX:  (516) 282-3729
;  INFORMATION FOR SEQ ID NO:  115:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1363 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..1363
US-08-235-836C-115


  Query Match             7.3%;  Score 39.4;  DB 4;  Length 1363;
  Best Local Similarity   48.8%;  Pred. No. 0.0063;
  Matches  106;  Conservative    0;  Mismatches  111;  Indels    0;  Gaps    0;

Qy      33 agcttcttcgttattggcgatgagtgctaacgctgccatcagctatggcaattctgctga 92
           ||  ||   ||  |||   |   ||  |||   |    | ||| | |  ||   |
Db     114 AGACTCAGTGTCTTTGTTTAATGGTAATAAAATTTTTGTAAGCAAAGAAAAAAATAGCTC 173

Qy      93 tgctcaaccctatgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaa 152
             |   ||    || |  | || | ||||| ||| || ||    ||   ||    || |||
Db     174 CGGCAAATATGATTTAAGAGCAACAATTGATCAGGTTGAACTTAAAGGAACTTCCGATAA 233

Qy     153 gaacaccgcttatggtatttatgcaggttataactttgaccaaaattttggcgtagaacc 212
           ||||  | || ||| |    || |||||  ||   |||| | | |    |    |  | |
Db     234 AAACAATGGTTCTGGAACCCTTGAAGGTTCAAAGCCTGACAAGAGTAAAGTAAAATTAAC 293

Qy     213 cgaatttgttggttcagacgccaaagaatttaatgca 249
             |  | || || || | || |   |   ||  | |||
Db     294 AGTTTCTGCTGATTTAAACACAGTAACCTTAGAAGCA 330


RESULT   8
US-08-235-836C-121
; Sequence 121, Application US/08235836C
; Patent No. 6248562
;  GENERAL INFORMATION:
;    APPLICANT:  Dunn, John J.
;    APPLICANT:  Luft, Benjamin J.
;    TITLE OF INVENTION:  No. 6248562el Chimeric Proteins Comprising
;    TITLE OF INVENTION:  Borrelia Polypeptides and Uses Therefor
;    NUMBER OF SEQUENCES:  144
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Brookhaven National Laboratory
;      STREET:
;      CITY:  Upton
```

```
;       STATE:  NY
;       COUNTRY:  USA
;       ZIP:  11973
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/235,836C
;       FILING DATE:  29-APR-1994
;       CLASSIFICATION:  435
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/148,191
;       FILING DATE:  01-11-93
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Bogosian, Margaret C.
;       REGISTRATION NUMBER:  25,324
;       REFERENCE/DOCKET NUMBER:  BNL93-28A
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (516) 282-7338
;       TELEFAX:  (516) 282-3729
;   INFORMATION FOR SEQ ID NO:  121:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  1765 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  double
;       TOPOLOGY:  linear
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  1..1765
US-08-235-836C-121


  Query Match             7.3%;  Score 39.4;  DB 4;  Length 1765;
  Best Local Similarity   48.8%;  Pred. No. 0.0071;
  Matches  106;  Conservative    0;  Mismatches  111;  Indels    0;  Gaps    0;

Qy      33 agcttcttcgttattggcgatgagtgctaacgctgccatcagctatggcaattctgctga 92
           ||  ||   ||  |||   |   ||  |||   |    | ||| | |  ||   |
Db     114 AGACTCAGTGTCTTTGTTTAATGGTAATAAAATTTTTGTAAGCAAAGAAAAAAATAGCTC 173

Qy      93 tgctcaaccctatgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaa 152
             |   ||    || |  | || | ||||| ||| || ||    ||   ||    || |||
Db     174 CGGCAAATATGATTTAAGAGCAACAATTGATCAGGTTGAACTTAAAGGAACTTCCGATAA 233

Qy     153 gaacaccgcttatggtatttatgcaggttataactttgaccaaaattttggcgtagaacc 212
           ||||  | ||  ||| |    || |||||  ||   |||| | | |    |    |  | |
Db     234 AAACAATGGTTCTGGAACCCTTGAAGGTTCAAAGCCTGACAAGAGTAAAGTAAAATTAAC 293

Qy     213 cgaatttgttggttcagacgccaaagaatttaatgca 249
           |  | ||  ||  ||  | ||  |   |   ||  | |||
Db     294 AGTTTCTGCTGATTTAAACACAGTAACCTTAGAAGCA 330


RESULT   9
US-08-137-175A-1
; Sequence 1, Application US/08137175A
; Patent No. 5777095
;  GENERAL INFORMATION:
;    APPLICANT:  BARBOUR, Alan G.
;    APPLICANT:  BERGSTROEM, Sven
;    APPLICANT:  HANSSON, Lennart
;    TITLE OF INVENTION:  IMPROVEMENT IN BORRELIA BURGDORFERI AND
;    TITLE OF INVENTION:  PROPHYLAXIS
;    NUMBER OF SEQUENCES:  22
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BROWDY AND NEIMARK
;      STREET:  419 Seventh Street, N.W., Suite 300
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  USA
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/137,175A
;      FILING DATE:  26-OCT-1993
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US92/08972
;      FILING DATE:  22-OCT-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  COOPER, Iver P.
;      REGISTRATION NUMBER:  28,005
;      REFERENCE/DOCKET NUMBER:  BARBOUR-1B
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-628-5197
;      TELEFAX:  202-737-3528
;      TELEX:  248633
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1959 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    ORIGINAL SOURCE:
;      ORGANISM:  Borrelia burgdorferi
;      STRAIN:  B31 (ATCC 35210)
;    FEATURE:
;      NAME/KEY:  misc_feature
;      LOCATION:  123..142
;      OTHER INFORMATION:  /function= "Primer"
;    FEATURE:
;      NAME/KEY:  misc_feature
;      LOCATION:  584..607
;      OTHER INFORMATION:  /function= "Primer"
;    FEATURE:
;      NAME/KEY:  misc_feature
;      LOCATION:  776..794
;      OTHER INFORMATION:  /function= "Primer"
;    FEATURE:
;      NAME/KEY:  misc_feature
;      LOCATION:  806..817
;      OTHER INFORMATION:  /function= "Primer"
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  119..940
;      OTHER INFORMATION:  /product= "OspA"
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  950..1840
;      OTHER INFORMATION:  /product= "OspB"
US-08-137-175A-1


  Query Match             7.3%;  Score 39.4;  DB 1;  Length 1959;
  Best Local Similarity   48.8%;  Pred. No. 0.0074;
  Matches  106;  Conservative    0;  Mismatches  111;  Indels    0;  Gaps    0;

Qy      33 agcttcttcgttattggcgatgagtgctaacgctgccatcagctatggcaattctgctga 92
           ||  ||   ||  |||   |   ||  |||   |    | ||| | |  ||   |
Db    1111 AGACTCAGTGTCTTTGTTTAATGGTAATAAAATTTTTGTAAGCAAAGAAAAAAATAGCTC 1170

Qy      93 tgctcaaccctatgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaa 152
             |   ||    || |  | || | ||||| ||| || ||    ||   ||    || |||
Db    1171 CGGCAAATATGATTTAAGAGCAACAATTGATCAGGTTGAACTTAAAGGAACTTCCGATAA 1230

Qy     153 gaacaccgcttatggtatttatgcaggttataactttgaccaaaattttggcgtagaacc 212
           ||||  | ||  ||| |    || |||||  ||   |||| | | |    |    |  | |
Db    1231 AAACAATGGTTCTGGAACCCTTGAAGGTTCAAAGCCTGACAAGAGTAAAGTAAAATTAAC 1290
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```
Qy    213 cgaatttgttggttcagacgccaaagaatttaatgca 249
          |  | || || || | || |   |   || .| |||
Db   1291 AGTTTCTGCTGATTTAAACACAGTAACCTTAGAAGCA 1327


RESULT  10
US-08-479-017-1
; Sequence 1, Application US/08479017
; Patent No. 6143872
;  GENERAL INFORMATION:
;    APPLICANT:  BARBOUR, Alan G.
;    APPLICANT:  BERGSTROEM, Sven
;    APPLICANT:  HANSSON, Lennart
;    TITLE OF INVENTION:  IMPROVEMENT IN BORRELIA BURGDORFERI AND
;    TITLE OF INVENTION:  PROPHYLAXIS
;    NUMBER OF SEQUENCES:  22
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BROWDY AND NEIMARK
;      STREET:  419 Seventh Street, N.W., Suite 300
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  USA
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/479,017
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/137,175
;      FILING DATE:  26-OCT-1993
;      APPLICATION NUMBER:  PCT/US92/08972
;      FILING DATE:  22-OCT-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  COOPER, Iver P.
;      REGISTRATION NUMBER:  28,005
;      REFERENCE/DOCKET NUMBER:  BARBOUR-1B
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-628-5197
;      TELEFAX:  202-737-3528
;      TELEX:  248633
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1959 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    ORIGINAL SOURCE:
;      ORGANISM:  Borrelia burgdorferi
;      STRAIN:  B31 (ATCC 35210)
;    FEATURE:
;      NAME/KEY:  misc_feature
;      LOCATION:  123..142
;      OTHER INFORMATION:  /function= "Primer"
;    FEATURE:
;      NAME/KEY:  misc_feature
;      LOCATION:  584..607
;      OTHER INFORMATION:  /function= "Primer"
;    FEATURE:
;      NAME/KEY:  misc_feature
;      LOCATION:  776..794
;      OTHER INFORMATION:  /function= "Primer"
;    FEATURE:
;      NAME/KEY:  misc_feature
;      LOCATION:  806..817
;      OTHER INFORMATION:  /function= "Primer"
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  119..940
;      OTHER INFORMATION:  /product= "OspA"
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  950..1840
;      OTHER INFORMATION:  /product= "OspB"
US-08-479-017-1


  Query Match             7.3%;  Score 39.4;  DB 3;  Length 1959;
  Best Local Similarity   48.8%;  Pred. No. 0.0074;
  Matches  106;  Conservative    0;  Mismatches  111;  Indels    0;  Gaps    0;

Qy     33 agcttcttcgttattggcgatgagtgctaacgctgccatcagctatggcaattctgctga 92
          || ||   ||  |||   |   ||  |||   |    | ||| | |  ||   |
Db   1111 AGACTCAGTGTCTTTGTTTAATGGTAATAAAATTTTTGTAAGCAAAGAAAAAAATAGCTC 1170

Qy     93 tgctcaaccctatgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaa 152
          |   ||    || |  | || | ||||| ||| || ||    ||   ||    || |||
Db   1171 CGGCAAATATGATTTAAGAGCAACAATTGATCAGGTTGAACTTAAAGGAACTTCCGATAA 1230

Qy    153 gaacaccgcttatggtatttatgcaggttataactttgaccaaaattttggcgtagaacc 212
           ||||  | || ||| |    || |||||  ||   |||| | | |   |    |  | |
Db   1231 AAACAATGGTTCTGGAACCCTTGAAGGTTCAAAGCCTGACAAGAGTAAAGTAAAATTAAC 1290

Qy    213 cgaatttgttggttcagacgccaaagaatttaatgca 249
          |  | || || || | || |   |   ||  | |||
Db   1291 AGTTTCTGCTGATTTAAACACAGTAACCTTAGAAGCA 1327


RESULT  11
US-08-663-998-2
; Sequence 2, Application US/08663998
; Patent No. 5846946
;  GENERAL INFORMATION:
;    APPLICANT:  HUEBNER, Robert C.
;    APPLICANT:  NORMAN, Jon A.
;    APPLICANT:  LIANG, Xiaowu
;    APPLICANT:  CARNER, Kristin R.
;    APPLICANT:  BARBOUR, Alan G.
;    APPLICANT:  LUKE, Catherine J.
;    TITLE OF INVENTION:  COMPOSITIONS AND METHODS FOR
;    TITLE OF INVENTION:  ADMINISTERING BORRELIA DNA
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Curtis, Morris & Safford, P.C.
;      STREET:  530 Fifth Avenue
;      CITY:  New York
;      STATE:  NY
;      COUNTRY:  USA
;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/663,998
;      FILING DATE:  06-JUN-1996
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Kowalski, Thomas J.
;      REGISTRATION NUMBER:  32,147
;      REFERENCE/DOCKET NUMBER:  454312-2440
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  212-840-3333
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  5952 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
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US-08-663-998-2

Query Match 7.3%; Score 39.4; DB 2; Length 5952;
Best Local Similarity 48.8%; Pred. No. 0.012;
Matches 106; Conservative 0; Mismatches 111; Indels 0; Gaps 0;

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Qy      33 agcttcttcgttattggcgatgagtgctaacgctgccatcagctatggcaatttctgctga 92
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Db    1980 AGACTCAGTGTCTTTGTTTAATGGTAATAAAATTTTTGTAAGCAAAGAAAAAAATAGCTC 2039

Qy      93 tgctcaaccctatgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaa 152
           |   ||    || |  | || | ||||| ||| || ||    ||   ||    || |||
Db    2040 CGGCAAATATGATTTAAGAGCAACAATTGATCAGGTTGAACTTAAAGGAACTTCCGATAA 2099

Qy     153 gaacaccgcttatggtatttatgcaggttataactttgaccaaaattttggcgtagaacc 212
           ||||  | || ||| |    || |||||  ||   |||| | | |   |    |  | |
Db    2100 AAACAATGGTTCTGGAACCCTTGAAGGTTCAAAGCCTGACAAGAGTAAAGTAAAATTAAC 2159

Qy     213 cgaatttgttggttcagacgccaaagaatttaatgca 249
           |  | || || || | || |   |   ||  | |||
Db    2160 AGTTTCTGCTGATTTAAACACAGTAACCTTAGAAGCA 2196
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RESULT 12
US-08-936-165A-246
; Sequence 246, Application US/08936165A
; Patent No. 6348582
; GENERAL INFORMATION:
; APPLICANT: Black, Michael
; APPLICANT: Burnham, Martin
; APPLICANT: Hodgson, John
; APPLICANT: Knowles, David
; APPLICANT: Lonetto, Michael
; APPLICANT: Nicholas, Richard
; APPLICANT: Pratt, Julie
; APPLICANT: Reichard, Richard
; APPLICANT: Rosenberg, Martin
; APPLICANT: Ward, Judith
; TITLE OF INVENTION: No. 6348582el Prokaryotic Polynucleotides,
; TITLE OF INVENTION: Polypeptides and Their Uses
; NUMBER OF SEQUENCES: 534
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corporation
; STREET: 709 Swedeland Road
; CITY: King of Prussia
; STATE: PA
; COUNTRY: USA
; ZIP: 19406-0939
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/936,165A
; FILING DATE: 24-SEP-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/027,032
; FILING DATE: 24-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Gimmi, Edward R
; REGISTRATION NUMBER: 38,891
; REFERENCE/DOCKET NUMBER: P50549
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610-270-4478
; TELEFAX: 610-270-5090
; TELEX:
; INFORMATION FOR SEQ ID NO: 246:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3323 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Genomic DNA
US-08-936-165A-246

Query Match 7.1%; Score 38.4; DB 4; Length 3323;
Best Local Similarity 50.6%; Pred. No. 0.019;
Matches 90; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

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           |||| || ||    |  |||||   | || ||   | |  |  |||| ||  |  |
Db    1099 GATGTTCTACGTATTCATGGTGAAGATATGGGCACACTTTATACCAAACACGTTGAATTN 1158

Qy     151 aagaacaccgcttatggtatttatgcaggttataactttgaccaaaattttggcgtagaa 210
           | ||||  |     |   |||||| |||| || |  | ||  ||  |   |  | |  |
Db    1159 GAAAACAAAGGCGTCGACTTTTATGAAGGTAATGAAGTGGATGAAGCTGAAGAAGAANCA 1218

Qy     211 cccgaatttgttggttcagacgccaaagaatttaatgcaggcgtgagtcctgtaaaag 268
           |  |   ||| | |||  |  || ||   | |  |||  |||| || | | |||
Db    1219 AAAGCTTGGATTGATGCAGTTGTAAATGATACTGAACCAGTTGTGAAACCGGAACAAG 1276
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RESULT 13
US-08-914-999-5
; Sequence 5, Application US/08914999
; Patent No. 6346406
; GENERAL INFORMATION:
; APPLICANT: Ryazanov, Alexey G.
; APPLICANT: Hait, William N.
; APPLICANT: Pavur, Karen S.
; TITLE OF INVENTION: ELONGATION FACTOR-2 KINASE (EF-2 KINASE)
; TITLE OF INVENTION: AND METHODS OF USE THEREFOR
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: David A. Jackson, Esq.
; STREET: 411 Hackensack Ave, Continental Plaza, 4th
; STREET: Floor
; CITY: Hackensack
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 07601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/914,999
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Jackson Esq., David A.
; REGISTRATION NUMBER: 26,742
; REFERENCE/DOCKET NUMBER: 601-1-078
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-487-5800
; TELEFAX: 201-343-1684
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3465 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ORIGINAL SOURCE:
; ORGANISM: Dictyostelium discoideum
US-08-914-999-5

Query Match 6.4%; Score 34.6; DB 4; Length 3465;
Best Local Similarity 54.3%; Pred. No. 0.31;

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Qy     143 tcaacggtaagaacaccgcttatggtatttatgcaggttataactttgaccaaaattttg 202
           ||| |   |   |||   | ||| | ||| |||   ||   | || ||    || || |
Db    2369 TCATCACCACTCACAAATGTAATGCTGTTTGTGCTCTTTTAGATTTAGATGTTAAATTGG 2428

Qy     203 gcgtagaac 211
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RESULT  14
US-08-858-207A-234/c
; Sequence 234, Application US/08858207A
; Patent No. 6348328
;  GENERAL INFORMATION:
;    APPLICANT:  Black, Michael
;    APPLICANT:  Hodgson, John
;    APPLICANT:  Knowles, David
;    APPLICANT:  Nicholas, Richard
;    APPLICANT:  Stodola, Robert
;    TITLE OF INVENTION:  No. 6348328el Compounds
;    NUMBER OF SEQUENCES:  552
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SmithKline Beecham Corporation
;      STREET:  709 Swedeland Road
;      CITY:  King of Prussia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19406-0939
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/858,207A
;      FILING DATE:  09-MAY-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/017670
;      FILING DATE:  14-MAY-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Gimmi, Edward R
;      REGISTRATION NUMBER:  38,891
;      REFERENCE/DOCKET NUMBER:  P50475
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  610-270-4478
;      TELEFAX:  610-270-5090
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  234:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  730 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-858-207A-234


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  Matches   90;  Conservative    0;  Mismatches   97;  Indels    0;  Gaps    0;

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Qy     165 tggtatttatgcaggttataactttgaccaaaattttggcgtagaacccgaatttgttgg 224
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Qy     285 tggtgct 291
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RESULT  15
US-09-276-531-85
; Sequence 85, Application US/09276531
; Patent No. 6183968
;  GENERAL INFORMATION:
;    APPLICANT:  Bandman, Olga
;    APPLICANT:  Lal, Preeti
;    APPLICANT:  Hillman, Jennifer L.
;    APPLICANT:  Yue, Henry
;    APPLICANT:  Reddy, Roopa
;    APPLICANT:  Guegler, Karl J.
;    APPLICANT:  Baughn, Mariah R.
;    TITLE OF INVENTION:  COMPOSITION FOR THE DETECTION OF GENES ENCODING
;    TITLE OF INVENTION:  RECEPTORS AND PROTEINS ASSOCIATED WITH CELL PROLIFERATION
;    NUMBER OF SEQUENCES:  134
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  INCYTE PHARMACEUTICALS, INC.
;      STREET:  3174 PORTER DRIVE
;      CITY:  PALO ALTO
;      STATE:  CALIFORNIA
;      COUNTRY:  USA
;      ZIP:  94304
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  Word Perfect 6.1 for Windows/MS-DOS 6.2
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/276,531
;      FILING DATE:  Herewith
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/079,677
;      FILING DATE:  March 27, 1998
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Lynn E. Murry, Ph.D.
;      REGISTRATION NUMBER:  42,918
;      REFERENCE/DOCKET NUMBER:  PA-0008 US
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (650) 855-0555
;      TELEFAX:  (650) 845-4166
;  INFORMATION FOR SEQ ID NO:  85:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1197 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    IMMEDIATE SOURCE:
;      LIBRARY:  BRAITUT13
;      CLONE:  1622121
US-09-276-531-85


  Query Match             5.7%;  Score 31;  DB 4;  Length 1197;
  Best Local Similarity   51.0%;  Pred. No. 2.6;
  Matches   73;  Conservative    0;  Mismatches   70;  Indels    0;  Gaps    0;

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Db     200 ACACACTTGCAACTACAAACTTTCAGATTATTTCCGTGGCTGACTAACCTCCACATTATC 259
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Qy      76 tatggcaattctgctgatgctcaaccctatgttggtgccaaaattggtcaagtagacgcc 135
           | ||  |    | |||   |    || ||| |||| ||| |   |   ||    |||
Db     260 AGAGCCACATTCTTTTATGGAAATATTTAGGTTTGTGCAAAAGTAATTGCGGTCTTTGCC 319

Qy     136 aagcaaatcaacggtaagaacac 158
           |   || | || |  || | |||
Db     320 ATTAAAGTAAAGGCAAAAACCAC 342
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Job time: 3969 sec

GenCore version 4.5


OM nucleic - nucleic search, using sw model

Run on: August 8, 2002, 19:09:07 ; Search time 339.65 Seconds
(without alignments)
3734.846 Million cell updates/sec

Title: US-09-164-714-6
Perfect score: 543
Sequence: 1 atgaaaactttaaaaacact.....gcgctcatttggctttttaa 543

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1406282 seqs, 1168085023 residues

Total number of hits satisfying chosen parameters: 2812564

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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2: /cgn2_6/ptodata/1/pna/US06_NEW_COMB.seq:*
3: /cgn2_6/ptodata/1/pna/US07_NEW_COMB.seq:*
4: /cgn2_6/ptodata/1/pna/US08_NEW_COMB.seq:*
5: /cgn2_6/ptodata/1/pna/US09_NEW_COMB.seq:*
6: /cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq:*
7: /cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq2:*
8: /cgn2_6/ptodata/1/pna/US60_NEW_COMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | Result No. | Score | % Query Match | Length | DB | ID | Description |
|---|---|---|---|---|---|---|---|
| | 1 | 53.8 | 9.9 | 10251 | 1 | PCT-US02-12405-582 | Sequence 582, App |
| | 2 | 53.8 | 9.9 | 10251 | 7 | US-10-045-674-582 | Sequence 582, App |
| | 3 | 49.8 | 9.2 | 1355 | 1 | PCT-US02-12405-593 | Sequence 593, App |
| | 4 | 49.8 | 9.2 | 1355 | 7 | US-10-045-674-593 | Sequence 593, App |
| | 5 | 35.8 | 6.6 | 8201 | 5 | US-09-958-617A-17 | Sequence 17, Appl |
| | 6 | 35 | 6.4 | 19446 | 7 | US-10-158-844-51 | Sequence 51, Appl |
| | 7 | 34.6 | 6.4 | 1349 | 5 | US-09-895-913A-135 | Sequence 135, App |
| c | 8 | 34.6 | 6.4 | 2284 | 5 | US-09-886-492-18859 | Sequence 18859, A |
| c | 9 | 34 | 6.3 | 1098 | 5 | US-09-718-803A-6 | Sequence 6, Appli |
| | 10 | 33.8 | 6.2 | 1018 | 5 | US-09-919-002-11013 | Sequence 11013, A |
| | 11 | 33.8 | 6.2 | 1500 | 7 | US-10-179-131-4849 | Sequence 4849, Ap |
| | 12 | 33.8 | 6.2 | 1887 | 7 | US-10-179-131-2632 | Sequence 2632, Ap |
| | 13 | 33.8 | 6.2 | 3024 | 1 | PCT-US02-16234-63 | Sequence 63, Appl |
| | 14 | 33.8 | 6.2 | 3060 | 1 | PCT-US02-16234-48 | Sequence 48, Appl |
| c | 15 | 33.4 | 6.2 | 467 | 5 | US-09-886-492-17610 | Sequence 17610, A |
| c | 16 | 33.4 | 6.2 | 128779 | 6 | US-10-081-327A-38 | Sequence 38, Appl |
| c | 17 | 33.2 | 6.1 | 2760 | 5 | US-09-789-161A-13 | Sequence 13, Appl |
| | 18 | 32.8 | 6.0 | 273 | 7 | US-10-179-131-3697 | Sequence 3697, Ap |
| c | 19 | 32.8 | 6.0 | 523 | 7 | US-10-027-632-105035 | Sequence 105035, |
| | 20 | 32.8 | 6.0 | 663 | 7 | US-10-027-632-13767 | Sequence 13767, A |
| | 21 | 32.8 | 6.0 | 3441 | 7 | US-10-179-131-709 | Sequence 709, App |
| | 22 | 32.6 | 6.0 | 2967 | 7 | US-10-179-131-1639 | Sequence 1639, Ap |
| | 23 | 32.4 | 6.0 | 15462 | 7 | US-10-105-299-11940 | Sequence 11940, A |
| c | 24 | 32.2 | 5.9 | 776 | 7 | US-10-027-632-150729 | Sequence 150729, |
| | 25 | 32.2 | 5.9 | 2277 | 7 | US-10-179-131-1144 | Sequence 1144, Ap |
| | 26 | 32.2 | 5.9 | 2546 | 7 | US-10-137-036-95 | Sequence 95, Appl |
| | 27 | 32.2 | 5.9 | 3264 | 7 | US-10-179-131-3211 | Sequence 3211, Ap |
| c | 28 | 32 | 5.9 | 552 | 5 | US-09-918-995-32542 | Sequence 32542, A |
| | 29 | 32 | 5.9 | 1440 | 7 | US-10-179-131-4958 | Sequence 4958, Ap |
| c | 30 | 32 | 5.9 | 3910 | 7 | US-10-138-838-91 | Sequence 91, Appl |
| c | 31 | 32 | 5.9 | 3910 | 7 | US-10-138-898-91 | Sequence 91, Appl |
| c | 32 | 32 | 5.9 | 3910 | 7 | US-10-138-905-91 | Sequence 91, Appl |
| c | 33 | 32 | 5.9 | 3910 | 7 | US-10-139-031-91 | Sequence 91, Appl |
| c | 34 | 32 | 5.9 | 3910 | 7 | US-10-139-218-91 | Sequence 91, Appl |
| c | 35 | 32 | 5.9 | 3910 | 7 | US-10-139-296-91 | Sequence 91, Appl |
| c | 36 | 32 | 5.9 | 3910 | 7 | US-10-138-916-91 | Sequence 91, Appl |
| | 37 | 31.8 | 5.9 | 638 | 7 | US-10-027-632-228788 | Sequence 228788, |
| c | 38 | 31.8 | 5.9 | 1503841 | 5 | US-09-946-807-1 | Sequence 1, Appli |
| | 39 | 31.6 | 5.8 | 873 | 7 | US-10-179-131-4579 | Sequence 4579, Ap |
| | 40 | 31.6 | 5.8 | 4143 | 8 | US-60-360-039-25104 | Sequence 25104, A |
| c | 41 | 31.4 | 5.8 | 1070 | 7 | US-10-027-632-121833 | Sequence 121833, |
| c | 42 | 31.4 | 5.8 | 1070 | 7 | US-10-027-632-121834 | Sequence 121834, |
| c | 43 | 31.4 | 5.8 | 1070 | 7 | US-10-027-632-121835 | Sequence 121835, |
| | 44 | 31.4 | 5.8 | 1776 | 7 | US-10-179-131-4130 | Sequence 4130, Ap |
| | 45 | 31.4 | 5.8 | 2676 | 5 | US-09-935-625-24887 | Sequence 24887, A |

ALIGNMENTS

```
RESULT 1
PCT-US02-12405-582
; Sequence 582, Application PC/TUS0212405
; GENERAL INFORMATION:
;  APPLICANT: LADNER, ROBERT C.
;  APPLICANT:  COHEN, EDWARD H.
;  APPLICANT:  NASTRI, HORACIO G.
;  APPLICANT:  ROOKEY, KRISTIN L.
;  APPLICANT:  HOET, RENE
;  APPLICANT:  HOOGENBOOM, HENDRICUS R. J. M.
;  TITLE OF INVENTION: NOVEL METHODS OF CONSTRUCTING LIBRARIES COMPRISING
;  TITLE OF INVENTION:  DISPLAYED AND/OR EXPRESSED MEMBERS OF A DIVERSE FAMILY
;  TITLE OF INVENTION:  OF PEPTIDES, POLYPEPTIDES OR PROTEINS AND THE NOVEL
;  TITLE OF INVENTION:  LIBRARIES
;  FILE REFERENCE: DYAX/002 CIP2
;  CURRENT APPLICATION NUMBER: PCT/US02/12405
;  CURRENT FILING DATE:  2002-04-17
;  PRIOR APPLICATION NUMBER: 06/198,069
;  PRIOR FILING DATE: 2000-04-17
;  PRIOR APPLICATION NUMBER: 09/837,306
;  PRIOR FILING DATE: 2001-04-17
;  NUMBER OF SEQ ID NOS: 635
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 582
;   LENGTH: 10251
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: CJRA05
;   OTHER INFORMATION: nucleotide sequence
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (1578)..(1916)
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (2388)..(2843)
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (2849)..(2893)
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (3189)..(4232)
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (7418)..(8119)
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (8160)..(9452)
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PCT-US02-12405-582

Query Match 9.9%; Score 53.8; DB 1; Length 10251;
Best Local Similarity 27.2%; Pred. No. 9.8e-06;
Matches 115; Conservative 103; Mismatches 205; Indels 0; Gaps 0;

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Qy     45 attggcgatgagtgctaacgctgccatcagctatggcaattctgctgatgctcaacccta 104
          || ||| |    ||||: :| :| : |:  :||:|  ||    ||| |:||: |
Db   8981 ataggctagctctgctwsyggygayttygaytaygaraaratggctaawgcyaayaargg 9040

Qy    105 tgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaagaacaccgctta 164
          | :    |: |:| :| : | | : |:||   :||:: : |:| :||:  :|    : |
Db   9041 sgcyatgacygaraaygcygaygaraaygckytrcarwsygaygcyaarggyaarytwga 9100

Qy    165 tggtatttatgcaggttataactttgaccaaaattttggcgtagaacccgaatttgttgg 224
          : :: |   : | | :||:  :  :| |    |:  :  : | |    :|  : :| :
Db   9101 ywsygtcgckacygaytayggygcygccatcgayggyttyatyggygaygtcwsyggyyt 9160

Qy    225 ttcagacgccaaagaatttaatgcaggcgtgagtcctgtaaaaggtgatgtgaagtcttt 284
          : |  |:| :|| |    :| :| :| : |   :  :   ||   : |  ||       |
Db   9161 kgcyaayggyaayggygcyacyggwgayttygcwggytckaattcycaratggcycargt 9220

Qy    285 tggtgcttatggcacatatcgctataacttcatcaataccccatttttatgccaagggcaa 344
          :||:| :  :| :|  : :|  : :|    :| :  ::  | :| :: : |      :
Db   9221 yggwgayggkgayaaywswcckytwatgaayaaytttymgwcartayytwcctcyctycc 9280

Qy    345 attaggcattgctaagactaaagtagatgttaccagccgtaatgcaactacatactcaaa 404
          : :  |:|       :  : | | : |::::  : |:||  |:  :  :| ::: |
Db   9281 kcarwskgtygartgycgyccwttygtyttywsygcyggyaarccwtaygarttywsyat 9340

Qy    405 caaaagcgacaaaaccagcctagcaggcggtgttggtgttggctttaaaccattagcaaa 464
          : |  |:||:||:| :| ::|:    |:||:||:  :| :  ::|:  |    | || |
Db   9341 ygaytgygayaaratmaayytwttycgyggygtyttygckttyytkytataygtygcyac 9400

Qy    465 tgt 467
          : |
Db   9401 ytt 9403
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RESULT 2
US-10-045-674-582
; Sequence 582, Application US/10045674
; GENERAL INFORMATION:
; APPLICANT: LADNER, ROBERT C.
; APPLICANT: COHEN, EDWARD H.
; APPLICANT: NASTRI, HORACIO G.
; APPLICANT: ROOKEY, KRISTIN L.
; APPLICANT: HOET, RENE
; APPLICANT: HOOGENBOOM, HENDRICUS R. J. M.
; TITLE OF INVENTION: NOVEL METHODS OF CONSTRUCTING LIBRARIES COMPRISING
; TITLE OF INVENTION: DISPLAYED AND/OR EXPRESSED MEMBERS OF A DIVERSE FAMILY
; TITLE OF INVENTION: OF PEPTIDES, POLYPEPTIDES OR PROTEINS AND THE NOVEL
; TITLE OF INVENTION: LIBRARIES
; FILE REFERENCE: DYAX/002 CIP2
; CURRENT APPLICATION NUMBER: US/10/045,674
; CURRENT FILING DATE: 2001-10-25
; PRIOR APPLICATION NUMBER: 60/198,069
; PRIOR FILING DATE: 2000-04-17
; PRIOR APPLICATION NUMBER: 09/837,306
; PRIOR FILING DATE: 2001-04-17
; NUMBER OF SEQ ID NOS: 635
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 582
; LENGTH: 10251
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: CJRA05
; OTHER INFORMATION: nucleotide sequence
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1578)..(1916)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (2388)..(2843)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (2849)..(2893)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (3189)..(4232)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (7418)..(8119)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (8160)..(9452)
US-10-045-674-582

Query Match 9.9%; Score 53.8; DB 7; Length 10251;
Best Local Similarity 27.2%; Pred. No. 9.8e-06;
Matches 115; Conservative 103; Mismatches 205; Indels 0; Gaps 0;

Qy 45 attggcgatgagtgctaacgctgccatcagctatggcaattctgctgatgctcaacccta 104
|| ||| | ||||: :| :| : |: :||:| || ||| |:||: |
Db 8981 ataggctagctctgctwsyggygayttygaytaygaraaratggctaawgcyaayaargg 9040

Qy 105 tgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaagaacaccgctta 164
| : |: |:| :| : | | : |:|| :||:: : |:| :||: :| : |
Db 9041 sgcyatgacygaraaygcygaygaraaygckytrcarwsygaygcyaarggyaarytwga 9100

Qy 165 tggtatttatgcaggttataactttgaccaaaattttggcgtagaacccgaatttgttgg 224
: :: | : | | :||: : :| | |: : : | | :| : :| :
Db 9101 ywsygtcgckacygaytayggygcygccatcgayggyttyatyggygaygtcwsyggyyt 9160

Qy 225 ttcagacgccaaagaatttaatgcaggcgtgagtcctgtaaaaggtgatgtgaagtcttt 284
: | |:| :|| | :| :| :| : | : : || : | || |
Db 9161 kgcyaayggyaayggygcyacyggwgayttygcwggytckaattcycaratggcycargt 9220

Qy 285 tggtgcttatggcacatatcgctataacttcatcaataccccatttttatgccaagggcaa 344
:||:| : :| :| : :| : :| :| : :| :: : | :
Db 9221 yggwgayggkgayaaywswcckytwatgaayaaytttymgwcartayytwcctcyctycc 9280

Qy 345 attaggcattgctaagactaaagtagatgttaccagccgtaatgcaactacatactcaaa 404
: : |:| : | | : |:::: : |:|| |: : :| ::: |
Db 9281 kcarwskgtygartgycgyccwttygtyttywsygcyggyaarccwtaygarttywsyat 9340

Qy 405 caaaagcgacaaaaccagcctagcaggcggtgttggtgttggctttaaaccattagcaaa 464
: | |:||:||:| :| ::|: |:||:||: :| : ::|: | | || |
Db 9341 ygaytgygayaaratmaayytwttycgyggygtyttygckttyytkytataygtygcyac 9400

Qy 465 tgt 467
: |
Db 9401 ytt 9403

RESULT 3
PCT-US02-12405-593
; Sequence 593, Application PC/TUS0212405
; GENERAL INFORMATION:
; APPLICANT: LADNER, ROBERT C.
; APPLICANT: COHEN, EDWARD H.
; APPLICANT: NASTRI, HORACIO G.
; APPLICANT: ROOKEY, KRISTIN L.
; APPLICANT: HOET, RENE
; APPLICANT: HOOGENBOOM, HENDRICUS R. J. M.
; TITLE OF INVENTION: NOVEL METHODS OF CONSTRUCTING LIBRARIES COMPRISING
; TITLE OF INVENTION: DISPLAYED AND/OR EXPRESSED MEMBERS OF A DIVERSE FAMILY
; TITLE OF INVENTION: OF PEPTIDES, POLYPEPTIDES OR PROTEINS AND THE NOVEL
; TITLE OF INVENTION: LIBRARIES
; FILE REFERENCE: DYAX/002 CIP2
; CURRENT APPLICATION NUMBER: PCT/US02/12405
; CURRENT FILING DATE: 2002-04-17
; PRIOR APPLICATION NUMBER: 06/198,069

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;  PRIOR FILING DATE: 2000-04-17
;  PRIOR APPLICATION NUMBER: 09/837,306
;  PRIOR FILING DATE: 2001-04-17
;  NUMBER OF SEQ ID NOS: 635
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 593
;   LENGTH: 1355
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: M13-III
;   OTHER INFORMATION: nucleotide sequence
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (1)..(1305)
PCT-US02-12405-593


  Query Match             9.2%;  Score 49.8;  DB 1;  Length 1355;
  Best Local Similarity   25.4%;  Pred. No. 8.1e-05;
  Matches  105;  Conservative  108;  Mismatches  200;  Indels    0;  Gaps    0;

Qy      55 agtgctaacgctgccatcagctatggcaattctgctgatgctcaaccctatgttggtgcc 114
           :::| :: :| :| : |:  :||:|  ||    ||: |:||: |       | :    |:
Db     844 wsyggywsyggygayttygaytaygaraaratggcwaaygcyaayaarggsgcyatgacy 903

Qy     115 aaaattggtcaagtagacgccaagcaaatcaacggtaagaacaccgcttatggtatttat 174
            |:| :| : | | : |:||   :||::   |:| :||:  :|    : |: :: |   :
Db     904 garaaygcygaygaraaygcrctrcarwstgaygcyaarggyaarytwgaywsygtcgcy 963

Qy     175 gcaggttataactttgaccaaaatttggcgtagaacccgaatttgttggttcagacgcc 234
            |:| :||:     || :    |:  :  : | |    :|  : :| :  : |  |:| :
Db     964 acwgaytayggtgctgcyatcgayggyttyatyggygaygtywsyggyctkgctaayggy 1023

Qy     235 aaagaatttaatgcaggcgtgagtcctgtaaaaggtgatgtgaagtcttttggtgcttat 294
           || | :  :| :| :| : |   :  :   ||   : |  ||       |:||:| :  :
Db    1024 aayggwgcyacyggwgayttygcwggytckaattcycaratggcycargtyggwgayggk 1083

Qy     295 ggcacatatcgctataacttcatcaataccccattttatgccaagggcaaattaggcatt 354
           | :|  : :|  : :|    :| :  ::  | :| :: : |      :     : :  |:
Db    1084 gayaaywswcckytwatgaayaayttymgwcartayytwccktcyctycckcarwskgty 1143

Qy     355 gctaagactaaagtagatgttaccagccgtaatgcaactacatactcaaacaaaagcgac 414
           |       :  : | | : |:::  : |:||  |:  :  :| ::: | : |  |:||:
Db    1144 gartgycgyccwttygtyttywsygcyggyaarccwtaygarttywsyatygaytgygay 1203

Qy     415 aaaaccagcctagcaggcggtgttggtgttggctttaaaccattagcaaatgt 467
           ||:| :| ::|:    |:||:||:  :| :  ::|:  |    | || | : |
Db    1204 aaratmaayytwttccgyggygtyttygckttyytkytataygtygcyacytt 1256


RESULT   4
US-10-045-674-593
; Sequence 593, Application US/10045674
; GENERAL INFORMATION:
;  APPLICANT: LADNER, ROBERT C.
;  APPLICANT:  COHEN, EDWARD H.
;  APPLICANT:  NASTRI, HORACIO G.
;  APPLICANT:  ROOKEY, KRISTIN L.
;  APPLICANT:  HOET, RENE
;  APPLICANT:  HOOGENBOOM, HENDRICUS R. J. M.
;  TITLE OF INVENTION: NOVEL METHODS OF CONSTRUCTING LIBRARIES COMPRISING
;  TITLE OF INVENTION:  DISPLAYED AND/OR EXPRESSED MEMBERS OF A DIVERSE FAMILY
;  TITLE OF INVENTION:  OF PEPTIDES, POLYPEPTIDES OR PROTEINS AND THE NOVEL
;  TITLE OF INVENTION:  LIBRARIES
;  FILE REFERENCE: DYAX/002 CIP2
;  CURRENT APPLICATION NUMBER: US/10/045,674
;  CURRENT FILING DATE:  2001-10-25
;  PRIOR APPLICATION NUMBER: 60/198,069
;  PRIOR FILING DATE: 2000-04-17
;  PRIOR APPLICATION NUMBER: 09/837,306
;  PRIOR FILING DATE: 2001-04-17
;  NUMBER OF SEQ ID NOS: 635
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 593
;   LENGTH: 1355
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: M13-III
;   OTHER INFORMATION: nucleotide sequence
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (1)..(1305)
US-10-045-674-593


  Query Match             9.2%;  Score 49.8;  DB 7;  Length 1355;
  Best Local Similarity   25.4%;  Pred. No. 8.1e-05;
  Matches  105;  Conservative  108;  Mismatches  200;  Indels    0;  Gaps    0;

Qy      55 agtgctaacgctgccatcagctatggcaattctgctgatgctcaaccctatgttggtgcc 114
           :::| :: :| :| : |:  :||:|  ||    ||: |:||: |       | :    |:
Db     844 wsyggywsyggygayttygaytaygaraaratggcwaaygcyaayaarggsgcyatgacy 903

Qy     115 aaaattggtcaagtagacgccaagcaaatcaacggtaagaacaccgcttatggtatttat 174
            |:| :| : | | : |:||   :||::   |:| :||:  :|    : |: :: |   :
Db     904 garaaygcygaygaraaygcrctrcarwstgaygcyaarggyaarytwgaywsygtcgcy 963

Qy     175 gcaggttataactttgaccaaaatttggcgtagaacccgaatttgttggttcagacgcc 234
            |:| :||:     || :    |:  :  : | |    :|  : :| :  : |  |:| :
Db     964 acwgaytayggtgctgcyatcgayggyttyatyggygaygtywsyggyctkgctaayggy 1023

Qy     235 aaagaatttaatgcaggcgtgagtcctgtaaaaggtgatgtgaagtcttttggtgcttat 294
           || | :  :| :| :| : |   :  :   ||   : |  ||       |:||:| :  :
Db    1024 aayggwgcyacyggwgayttygcwggytckaattcycaratggcycargtyggwgayggk 1083

Qy     295 ggcacatatcgctataacttcatcaataccccattttatgccaagggcaaattaggcatt 354
           | :|  : :|  : :|    :| :  ::  | :| :: : |      :     : :  |:
Db    1084 gayaaywswcckytwatgaayaayttymgwcartayytwccktcyctycckcarwskgty 1143

Qy     355 gctaagactaaagtagatgttaccagccgtaatgcaactacatactcaaacaaaagcgac 414
           |       :  : | | : |:::  : |:||  |:  :  :| ::: | : |  |:||:
Db    1144 gartgycgyccwttygtyttywsygcyggyaarccwtaygarttywsyatygaytgygay 1203

Qy     415 aaaaccagcctagcaggcggtgttggtgttggctttaaaccattagcaaatgt 467
           ||:| :| ::|:    |:||:||:  :| :  ::|:  |    | || | : |
Db    1204 aaratmaayytwttccgyggygtyttygckttyytkytataygtygcyacytt 1256


RESULT   5
US-09-958-617A-17
; Sequence 17, Application US/09958617A
; GENERAL INFORMATION:
;  APPLICANT: Fisher et al., Larry
;  TITLE OF INVENTION: Complex Formed by Small Integrin-Binding Ligand,
;  TITLE OF INVENTION:  N-Linked Glycoproteins (SIBLINGS) and Factor H
;  FILE REFERENCE: 54101
;  CURRENT APPLICATION NUMBER: US/09/958,617A
;  CURRENT FILING DATE:  2002-04-02
;  PRIOR APPLICATION NUMBER: 60/128,468
;  PRIOR FILING DATE: 1999-04-09
;  NUMBER OF SEQ ID NOS: 18
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 17
;   LENGTH: 8201
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: exon
;   LOCATION: (2387)..(2437)
;   FEATURE:
;   NAME/KEY: exon
;   LOCATION: (3577)..(3660)
;   FEATURE:
;   NAME/KEY: exon
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;   LOCATION: (3794)..(4780)
;   FEATURE:
;   NAME/KEY: exon
;   LOCATION: (5257)..(7896)
US-09-958-617A-17


  Query Match             6.6%;  Score 35.8;  DB 5;  Length 8201;
  Best Local Similarity   47.9%;  Pred. No. 2.4;
  Matches  103;  Conservative    0;  Mismatches  112;  Indels    0;  Gaps    0;

Qy    227 cagacgccaaagaatttaatgcaggcgtgagtcctgtaaaaggtgatgtgaagtcttttg 286
          || |||   | |    || ||  |||  || |   | | |||  | |   |  | | ||
Db   3957 caaacgaagaggggaatattgagggctggaatggggacacaggaaaagcagaaacatatg 4016

Qy    287 gtgcttatggcacatatcgctataacttcatcaatacccccattttatgccaagggcaaat 346
          ||  | |||| | | || | |  |   | ||  ||  ||  |     | ||||  ||
Db   4017 gtcatgatggaatacatgggaaagaagaaaacatcacagcaaatggcatccagggacaag 4076

Qy    347 taggcattgctaagactaaagtagatgttaccagccgtaatgcaactacatactcaaaca 406
          || ||||   | | | |   | ||     | |||  | ||  | | |  | |  |  | |
Db   4077 taagcatcattgacaatgctggagccacaaacagaagcaacactaatggaaatactgata 4136

Qy    407 aaagcgacaaaaccagcctagcaggcggtgttggt 441
          | |    | |||   |    |  |||| ||  |||
Db   4137 agaatacccaaaatggggatgttggcgatgcaggt 4171


RESULT   6
US-10-158-844-51
; Sequence 51, Application US/10158844
;   GENERAL INFORMATION:
;        APPLICANT: Kunsch et al.
;        TITLE OF INVENTION: Streptococcus pneumoniae Polynucleotides and Sequences
;        NUMBER OF SEQUENCES: 391
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Human Genome Sciences, Inc.
;             STREET: 9410 Key West Avenue
;             CITY: Rockville
;             STATE: Maryland
;             COUNTRY: USA
;             ZIP: 20850
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: CD-R
;             COMPUTER: Dell Latitude Pentium 3
;             OPERATING SYSTEM: Windows 98
;             SOFTWARE: ASCII Text
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/10/158,844
;             FILING DATE: 03-Jun-2002
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US 08/961,527
;             FILING DATE: 1997-10-30
;             APPLICATION NUMBER: US 60/029,960
;             FILING DATE: 1996-10-31
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Hyman, Mark J.
;             REGISTRATION NUMBER: 46,789
;             REFERENCE/DOCKET NUMBER: PB340P1D1
;   INFORMATION FOR SEQ ID NO: 51:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 19446 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: double
;             TOPOLOGY: linear
;        SEQUENCE DESCRIPTION: SEQ ID NO: 51:
US-10-158-844-51


  Query Match             6.4%;  Score 35;  DB 7;  Length 19446;
  Best Local Similarity   49.2%;  Pred. No. 5.5;
  Matches   92;  Conservative    0;  Mismatches   95;  Indels    0;  Gaps    0;

Qy    105 tgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaagaacaccgctta 164
          | ||| ||     | | ||   | |||||||      || |||| |   | |   ||
Db  18487 TATTGCTGTTTTGACTAGTGGTGGAGACGCCCCTGGTATGAACGCTGCCATCCGTGCAGT 18546

Qy    165 tggtatttatgcaggttataactttgaccaaaattttggcgtagaacccgaatttgttgg 224
          || |  | | |||  ||   |        ||  |||||| |  |   || || || |||
Db  18547 TGTTCGTCAAGCAATTTCAGAAGGAATGGAAGTTTTTGGTATCTATGACGGATATGCTGG 18606

Qy    225 ttcagacgccaaagaatttaatgcaggcgtgagtcctgtaaaaggtgatgtgaagtcttt 284
          |   |  |||   ||| || || |    |       ||  |  ||| ||  | |  |||
Db  18607 TATGGTTGCCGGTGAAATTCATCCCCTAGATGCAGCTTCAGTAGGGGACATCATTTCTCG 18666

Qy    285 tggtgct 291
          ||||| |
Db  18667 TGGTGGT 18673


RESULT   7
US-09-895-913A-135
; Sequence 135, Application US/09895913A
; GENERAL INFORMATION:
;  APPLICANT: Kleanthous, Harold
;  APPLICANT:  Al-Garawi, Amal
;  APPLICANT:  Miller, Charles
;  APPLICANT:  Tomb, Jean Francois
;  APPLICANT:  Oomen, Raymond P.
;  TITLE OF INVENTION: Identification of Polynucleotides
;  TITLE OF INVENTION:  Encoding Novel Helicobacter Polypeptides in the Helicobacter
;  TITLE OF INVENTION:  Genome
;  FILE REFERENCE: 06132/043002
;  CURRENT APPLICATION NUMBER: US/09/895,913A
;  CURRENT FILING DATE:  2001-06-29
;  PRIOR APPLICATION NUMBER: US 08/881,227
;  PRIOR FILING DATE: 1997-06-24
;  NUMBER OF SEQ ID NOS: 368
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 135
;   LENGTH: 1349
;   TYPE: DNA
;   ORGANISM: Helicobacter pylori
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (78)...(1298)
US-09-895-913A-135


  Query Match             6.4%;  Score 34.6;  DB 5;  Length 1349;
  Best Local Similarity   48.3%;  Pred. No. 3;
  Matches   97;  Conservative    0;  Mismatches  104;  Indels    0;  Gaps    0;

Qy     77 atggcaattctgctgatgctcaaccctatgttggtgccaaaattggtcaagtagacgcca 136
          |||||||| | |||  | || |  | |        ||  |||||| |    | |  |||
Db    118 atggcaataccgctagttctaacgctttaagacaggctcaaattgatgtcatcgcagcct 177

Qy    137 agcaaatcaacggtaagaacaccgcttatggtatttatgcaggttataactttgaccaaa 196
          | |  |||| |       |   ||  |      | |||||     | |||   | |
Db    178 atcctatcaccccatcaacgcccattgtgcaaaattatggctcgtttaaggataatggct 237

Qy    197 attttggcgtagaacccgaatttgttggttcagacgccaaagaatttaatgcaggcgtga 256
          || |||  |  |||  ||  || || |  || ||       |   | |  ||| |||||
Db    238 atgttgatggcgaattcgttttagtggaatctgagcatgccgccatgagcgcatgcgtgg 297

Qy    257 gtcctgtaaaaggtgatgtga 277
          |  |||    || ||  | ||
Db    298 gagctgccgcagctggaggga 318


RESULT   8
US-09-886-492-18859/c
; Sequence 18859, Application US/09886492
; GENERAL INFORMATION:
;  APPLICANT: Havukkala, Illka
```

```
;  TITLE OF INVENTION: Polynucleotides, Polypeptides Expressed
;  TITLE OF INVENTION:  by the Polynucleotides and Methods for Their Use
;  FILE REFERENCE: 11000.1009c2
;  CURRENT APPLICATION NUMBER: US/09/886,492
;  CURRENT FILING DATE:  2001-06-20
;  PRIOR APPLICATION NUMBER: 09/867,716
;  PRIOR FILING DATE: 2001-05-29
;  PRIOR APPLICATION NUMBER: 09/215,179
;  PRIOR FILING DATE: 1998-12-17
;  NUMBER OF SEQ ID NOS: 19860
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 18859
;   LENGTH: 2284
;   TYPE: DNA
;   ORGANISM: Pinus radiata
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(2284)
;   OTHER INFORMATION: n = A,T,C or G
US-09-886-492-18859


  Query Match             6.4%;  Score 34.6;  DB 5;  Length 2284;
  Best Local Similarity   50.3%;  Pred. No. 3.6;
  Matches   85;  Conservative    0;  Mismatches   84;  Indels    0;  Gaps    0;

Qy      82 aattctgctgatgctcaaccctatgttggtgccaaaattggtcaagtagacgccaagcaa 141
           ||  |||| |||| |    || || ||| ||  || ||||  | |       || |  |
Db    1999 AAAGCTGCCGATGTTGGTGCCGATCTTGTTGGGAAGATTGAGCTAAACATACCCGAAGAT 1940

Qy     142 atcaacggtaagaacaccgcttatggtatttatgcaggttataactttgaccaaaatttt 201
             |    | ||     | | |   | |  | |||  ||| |||| |||   | |    |
Db    1939 GACCCTCGCAACCCGGCTGTTATAGCTGATAATGTTGGTGATAATGTTGGAGACATAGCT 1880

Qy     202 ggcgtagaacccgaatttgttggttcagacgccaaagaatttaatgcag 250
           ||| | |   | || ||  |||| ||  | ||  |||  |    ||| |
Db    1879 GGCATGGGCTCAGATTTGTTTGGATCCTATGCTGAAGCTTCCTGTGCTG 1831


RESULT  9
US-09-718-803A-6/c
; Sequence 6, Application US/09718803A
; GENERAL INFORMATION:
;  APPLICANT: SHEPPARD, PAUL O.
;  APPLICANT:  JASPERS, STEPHEN R.
;  APPLICANT:  DEISHER, THERESA A.
;  APPLICANT:  BISHOP, PAUL D.
;  TITLE OF INVENTION: METHOD OF FORMING A PEPTIDE-RECEPTOR
;  TITLE OF INVENTION:  COMPLEX WITH ZSIG33
;  FILE REFERENCE: 99-62
;  CURRENT APPLICATION NUMBER: US/09/718,803A
;  CURRENT FILING DATE:  2002-05-07
;  PRIOR APPLICATION NUMBER: 60/166,765
;  PRIOR FILING DATE: 1999-11-22
;  NUMBER OF SEQ ID NOS: 16
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 6
;   LENGTH: 1098
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: degenerate sequence
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(1098)
;   OTHER INFORMATION: n = A,T,C or G
US-09-718-803A-6


  Query Match             6.3%;  Score 34;  DB 5;  Length 1098;
  Best Local Similarity   30.6%;  Pred. No. 4.3;
  Matches   48;  Conservative   27;  Mismatches   82;  Indels    0;  Gaps    0;

Qy      39 ttcgttattggcgatgagtgctaacgctgccatcagctatggcaattctgctgatgctca 98
           |: |:|  ||:   ||:   |: |  ::  |  |  | |  ||:   |  |:  : |:
Db    781 TYTGYTTRTGRTTYTGRTCNCKNARNSWNGCNCCNACNACNGCRTCNCCNCKNCKNCKNC 722

Qy      99 accctatgttggtgccaaaattggtcaagtagacgccaagcaaatcaacggtaagaacac 158
             ||  |  ||  : ||:|     ::  |  : ||    |:  |:   || |  |::| :
Db    721 KCCANARYTTNCKNCCDATNARNSWRTANARNACNGTNARRCARAANACNGGNARRAARA 662

Qy    159 cgcttatggtatttatgcaggttataactttgaccaa 195
            :  :|| ::  : |  ||    || ||  | |  |:
Db    661 ARAADATNSWNSWNACCCANACCATNACNGTNARNAR 625


RESULT  10
US-09-919-002-11013
; Sequence 11013, Application US/09919002
; GENERAL INFORMATION:
;  APPLICANT: Leshkowitz, Dena
;  APPLICANT:  Liu, Jin
;  TITLE OF INVENTION: NOVEL CONTIGS OBTAINED FROM VARIOUS cDNA
;  TITLE OF INVENTION:  LIBRARIES
;  FILE REFERENCE: 20411-752CON1
;  CURRENT APPLICATION NUMBER: US/09/919,002
;  CURRENT FILING DATE:  2001-07-30
;  PRIOR APPLICATION NUMBER: APPLICATION NUMBER: 09/359,922
;  PRIOR FILING DATE: FILING DATE: 1999-07-22
;  PRIOR APPLICATION NUMBER: APPLICATION NUMBER: US 09/034,341
;  PRIOR FILING DATE: FILING DATE: 1998-02-13
;  NUMBER OF SEQ ID NOS: 13203
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 11013
;   LENGTH: 1018
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-919-002-11013


  Query Match             6.2%;  Score 33.8;  DB 5;  Length 1018;
  Best Local Similarity   51.7%;  Pred. No. 4.8;
  Matches   77;  Conservative    0;  Mismatches   72;  Indels    0;  Gaps    0;

Qy       6 aactttaaaaacactattggcagtatcagcttcttcgttattggcgatgagtgctaacgc 65
           |||||| || | |    |   | | |||||||  ||||  ||||   |     || ||
Db     196 aactttcaacagaggccttttactctcagctttgtcgtatttgggttttgaaacttacca 255

Qy      66 tgccatcagctatggcaattctgctgatgctcaaccctatgttggtgccaaaattggtca 125
             |  |||    | |    |   | | ||||   | || | ||||  |  | | |||  ||
Db     256 ggttatctctcaggctgctgtggttcatgccacagccaaagttgaagaaatacttgaaca 315

Qy     126 agtagacgccaagcaaatcaacggtaaga 154
           || ||||  |  | |    | |||  | |
Db     316 agcagactacctgtatgaaagcggagaaa 344


RESULT  11
US-10-179-131-4849
; Sequence 4849, Application US/10179131
; GENERAL INFORMATION:
;  APPLICANT: HARE, ROBERTA S.
;  APPLICANT:  SHAW, KAREN J.
;  APPLICANT:  SHIMER JR., GEORGE H.
;  APPLICANT:  KESSLER, MARCO
;  APPLICANT:  NOLLING, JORK
;  APPLICANT:  ZENG, QIANDONG
;  APPLICANT:  GREENE, JONATHAN R.
;  TITLE OF INVENTION: CANDIDA ALBICANS NUCLEIC ACIDS AND POLYPEPTIDES,
;  TITLE OF INVENTION:  AND USES THEREFOR
;  FILE REFERENCE: 2976-4031
;  CURRENT APPLICATION NUMBER: US/10/179,131
;  CURRENT FILING DATE:  2002-06-21
;  NUMBER OF SEQ ID NOS: 10194
; SEQ ID NO 4849
;   LENGTH: 1500
```

```
;   TYPE: DNA
;   ORGANISM: Candida albicans
US-10-179-131-4849


  Query Match             6.2%;  Score 33.8;  DB 7;  Length 1500;
  Best Local Similarity   47.8%;  Pred. No. 5.4;
  Matches   98;  Conservative    0;  Mismatches  107;  Indels    0;  Gaps    0;

Qy    246 tgcaggcgtgagtcctgtaaaaggtgatgtgaagtcttttggtgcttatggcacatatcg 305
          ||| || |    | ||      |||| ||| || |    |  ||   ||||      |
Db    543 tgctggtggcttttctaatggtggtggtgtcaattacaataatggcaatggtggtgctta 602

Qy    306 ctataacttcatcaataccccatttttatgccaagggcaaattaggcattgctaagactaa 365
           ||| ||      | | |  || || || |   ||  |  || |  | |||| ||||||
Db    603 ttatgacaatgatactgcttcagttaattctttggaaacttttgttactgctgagactac 662

Qy    366 agtagatgttaccagccgtaatgcaactacatactcaaacaaaagcgacaaaaccagcct 425
            |   || |     |   | | || ||||    |  || ||  |  | || | ||   |
Db    663 tattactgattatgactacactccagctactatattcaagaatggtaataataacaaaat 722

Qy    426 agcaggcggtgttggtgttggcttt 450
          |   ||   |  ||||| | |  ||
Db    723 aaatggtaattatggtggtagaatt 747


RESULT  12
US-10-179-131-2632
; Sequence 2632, Application US/10179131
; GENERAL INFORMATION:
;  APPLICANT: HARE, ROBERTA S.
;  APPLICANT:  SHAW, KAREN J.
;  APPLICANT:  SHIMER JR., GEORGE H.
;  APPLICANT:  KESSLER, MARCO
;  APPLICANT:  NOLLING, JORK
;  APPLICANT:  ZENG, QIANDONG
;  APPLICANT:  GREENE, JONATHAN R.
;  TITLE OF INVENTION: CANDIDA ALBICANS NUCLEIC ACIDS AND POLYPEPTIDES,
;  TITLE OF INVENTION:  AND USES THEREFOR
;  FILE REFERENCE: 2976-4031
;  CURRENT APPLICATION NUMBER: US/10/179,131
;  CURRENT FILING DATE:  2002-06-21
;  NUMBER OF SEQ ID NOS: 10194
; SEQ ID NO 2632
;   LENGTH: 1887
;   TYPE: DNA
;   ORGANISM: Candida albicans
US-10-179-131-2632


  Query Match             6.2%;  Score 33.8;  DB 7;  Length 1887;
  Best Local Similarity   47.8%;  Pred. No. 5.9;
  Matches   98;  Conservative    0;  Mismatches  107;  Indels    0;  Gaps    0;

Qy    246 tgcaggcgtgagtcctgtaaaaggtgatgtgaagtcttttggtgcttatggcacatatcg 305
          ||| || |    | ||      |||| ||| || |    |  ||   ||||      |
Db    543 tgctggtggcttttctaacggtggtggtgtcaattacaataatggcaatggtggtgctta 602

Qy    306 ctataacttcatcaataccccatttttatgccaagggcaaattaggcattgctaagactaa 365
           ||| ||      | | |  || || || |   ||  |  || |  | |||| ||||||
Db    603 ttatgacaatgatactgcttcagttaattctttggaaacttttgttactgctgagactac 662

Qy    366 agtagatgttaccagccgtaatgcaactacatactcaaacaaaagcgacaaaaccagcct 425
            |   || |     |   | | || ||||    |  || ||  |  | || | ||   |
Db    663 tattactgattatgactacactccagctactatattcaagaatggtaataataacaaaat 722

Qy    426 agcaggcggtgttggtgttggcttt 450
          |   ||   |  ||||| | |  ||
Db    723 aaatggtaattatggtggtagaatt 747


RESULT  13
PCT-US02-16234-63
; Sequence 63, Application PC/TUS0216234
; GENERAL INFORMATION:
;  APPLICANT: INCYTE GENOMICS, INC.
;  APPLICANT:  YUE, Henry
;  APPLICANT:  LEE, Ernestine A.
;  APPLICANT:  BECHA, Shanya D.
;  APPLICANT:  BAUGHN, Mariah R.
;  APPLICANT:  YAO, Monique G.
;  APPLICANT:  TANG, Y. Tom
;  APPLICANT:  AU-YOUNG, Janice K.
;  APPLICANT:  LAL, Preeti G.
;  APPLICANT:  WARREN, Bridget A.
;  APPLICANT:  DUGGAN, Brendan M.
;  APPLICANT:  TRAN, Uyen K.
;  APPLICANT:  XU, Yuming
;  APPLICANT:  THANGAVELU, Kavitha
;  APPLICANT:  RICHARDSON, Thomas W.
;  APPLICANT:  BANDMAN, Olga
;  APPLICANT:  JONES, Karen Anne
;  APPLICANT:  YANG, Junming
;  APPLICANT:  EMERLING, Brooke M.
;  APPLICANT:  SWARNAKAR, Anita
;  APPLICANT:  LUO, Wen
;  APPLICANT:  WALIA, Narinder K.
;  APPLICANT:  AZIMZAI, Yalda
;  APPLICANT:  KHAN, Farrah A.
;  APPLICANT:  LU,Dyung Aina M.
;  APPLICANT:  GRIFFIN, Jennifer A.
;  APPLICANT:  LEE, Soo Yeun
;  APPLICANT:  BURFORD, Neil
;  APPLICANT:  ELLIOTT, Vicki S.
;  APPLICANT:  HONCHELL, Cynthia D.
;  APPLICANT:  HE, Ann
;  APPLICANT:  MASON, Patricia M.
;  APPLICANT:  LI, Joana X.
;  APPLICANT:  HAFALIA, April J.A.
;  APPLICANT:  GURURAJAN, Rajagopal
;  TITLE OF INVENTION: SECRETED PROTEINS
;  FILE REFERENCE: PF-0998 PCT
;  CURRENT APPLICATION NUMBER: PCT/US02/16234
;  CURRENT FILING DATE:  2002-05-21
;  PRIOR APPLICATION NUMBER: 60/293,728; 60/297,019; 60/299,297; 60/300,537; 60/301,9
;    60/362,439; 60/363,649; 60/366,041
;  PRIOR FILING DATE: 2001-05-25; 2001-06-08; 2001-06-19; 2001-06-22; 2001-06-29;
;    2002-03-06; 2002-03-08; 2002-03-19
;  NUMBER OF SEQ ID NOS: 64
;  SOFTWARE: PERL Program
; SEQ ID NO 63
;   LENGTH: 3024
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: misc_feature
;   OTHER INFORMATION: Incyte ID No: 7506368CB1
PCT-US02-16234-63


  Query Match             6.2%;  Score 33.8;  DB 1;  Length 3024;
  Best Local Similarity   51.7%;  Pred. No. 6.8;
  Matches   77;  Conservative    0;  Mismatches   72;  Indels    0;  Gaps    0;

Qy      6 aactttaaaaacactattggcagtatcagcttcttcgttattggcgatgagtgctaacgc 65
          |||||| || | |    |   | | |||||||  ||||  ||||   |    || ||
Db    297 aactttcaacagaggccttttactctcagctttgtcgtatttgggttttgaaacttacca 356

Qy     66 tgccatcagctatggcaattctgctgatgctcaaccctatgttggtgccaaaattggtca 125
           |  |||    | |    |   | | ||||   | || | ||||  |  | | |||  ||
Db    357 ggttatctctcaggctgctgtggttcatgccacagccaaagttgaagaaatacttgaaca 416

Qy    126 agtagacgccaagcaaatcaacggtaaga 154
          || ||||  |  | |    | |||  | |
Db    417 agcagactacctgtatgaaagcggagaaa 445
```

```
RESULT 14
PCT-US02-16234-48
; Sequence 48, Application PC/TUS0216234
; GENERAL INFORMATION:
;  APPLICANT: INCYTE GENOMICS, INC.
;  APPLICANT:  YUE, Henry
;  APPLICANT:  LEE, Ernestine A.
;  APPLICANT:  BECHA, Shanya D.
;  APPLICANT:  BAUGHN, Mariah R.
;  APPLICANT:  YAO, Monique G.
;  APPLICANT:  TANG, Y. Tom
;  APPLICANT:  AU-YOUNG, Janice K.
;  APPLICANT:  LAL, Preeti G.
;  APPLICANT:  WARREN, Bridget A.
;  APPLICANT:  DUGGAN, Brendan M.
;  APPLICANT:  TRAN, Uyen K.
;  APPLICANT:  XU, Yuming
;  APPLICANT:  THANGAVELU, Kavitha
;  APPLICANT:  RICHARDSON, Thomas W.
;  APPLICANT:  BANDMAN, Olga
;  APPLICANT:  JONES, Karen Anne
;  APPLICANT:  YANG, Junming
;  APPLICANT:  EMERLING, Brooke M.
;  APPLICANT:  SWARNAKAR, Anita
;  APPLICANT:  LUO, Wen
;  APPLICANT:  WALIA, Narinder K.
;  APPLICANT:  AZIMZAI, Yalda
;  APPLICANT:  KHAN, Farrah A.
;  APPLICANT:  LU,Dyung Aina M.
;  APPLICANT:  GRIFFIN, Jennifer A.
;  APPLICANT:  LEE, Soo Yeun
;  APPLICANT:  BURFORD, Neil
;  APPLICANT:  ELLIOTT, Vicki S.
;  APPLICANT:  HONCHELL, Cynthia D.
;  APPLICANT:  HE, Ann
;  APPLICANT:  MASON, Patricia M.
;  APPLICANT:  LI, Joana X.
;  APPLICANT:  HAFALIA, April J.A.
;  APPLICANT:  GURURAJAN, Rajagopal
;  TITLE OF INVENTION: SECRETED PROTEINS
;  FILE REFERENCE: PF-0998 PCT
;  CURRENT APPLICATION NUMBER: PCT/US02/16234
;  CURRENT FILING DATE:  2002-05-21
;  PRIOR APPLICATION NUMBER: 60/293,728; 60/297,019; 60/299,297; 60/300,537; 60/301,936;
;    60/362,439; 60/363,649; 60/366,041
;  PRIOR FILING DATE: 2001-05-25; 2001-06-08; 2001-06-19; 2001-06-22; 2001-06-29;
;    2002-03-06; 2002-03-08; 2002-03-19
;  NUMBER OF SEQ ID NOS: 64
;  SOFTWARE: PERL Program
; SEQ ID NO 48
;   LENGTH: 3060
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: misc_feature
;   OTHER INFORMATION: Incyte ID No: 2726954CB1
PCT-US02-16234-48


  Query Match             6.2%;  Score 33.8;  DB 1;  Length 3060;
  Best Local Similarity   51.7%;  Pred. No. 6.9;
  Matches   77;  Conservative    0;  Mismatches   72;  Indels    0;  Gaps    0;

Qy       6 aactttaaaaacactattggcagtatcagcttcttcgttattggcgatgagtgctaacgc 65
           |||||| || | |    |   | | |||||||  ||||  ||||   |     || ||
Db     280 aactttcaacagaggccttttactctcagctttgtcgtatttgggttttgaaacttacca 339

Qy      66 tgccatcagctatggcaattctgctgatgctcaaccctatgttggtgccaaaattggtca 125
             |  |||    | |    |   | | ||||   | || | ||||  |  | | |||  ||
Db     340 ggttatctctcaggctgctgtggttcatgccacagccaaagttgaagaaatacttgaaca 399

Qy     126 agtagacgccaagcaaatcaacggtaaaga 154
```

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           || ||||  |  | |    | |||  | |
Db     400 agcagactacctgtatgaaagcggagaaa 428


RESULT 15
US-09-886-492-17610/c
; Sequence 17610, Application US/09886492
; GENERAL INFORMATION:
;  APPLICANT: Havukkala, Illka
;  TITLE OF INVENTION: Polynucleotides, Polypeptides Expressed
;  TITLE OF INVENTION:  by the Polynucleotides and Methods for Their Use
;  FILE REFERENCE: 11000.1009c2
;  CURRENT APPLICATION NUMBER: US/09/886,492
;  CURRENT FILING DATE:  2001-06-20
;  PRIOR APPLICATION NUMBER: 09/867,716
;  PRIOR FILING DATE: 2001-05-29
;  PRIOR APPLICATION NUMBER: 09/215,179
;  PRIOR FILING DATE: 1998-12-17
;  NUMBER OF SEQ ID NOS: 19860
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17610
;   LENGTH: 467
;   TYPE: DNA
;   ORGANISM: Pinus radiata
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(467)
;   OTHER INFORMATION: n = A,T,C or G
US-09-886-492-17610


  Query Match             6.2%;  Score 33.4;  DB 5;  Length 467;
  Best Local Similarity   54.7%;  Pred. No. 4.9;
  Matches   64;  Conservative    0;  Mismatches   53;  Indels    0;  Gaps    0;

Qy     241 tttaatgcaggcgtgagtcctgtaaaaggtgatgtgaagtcttttggtgcttatggcaca 300
           |||   | ||  ||  | |||| ||| | |||| || | || | | ||  ||||   |
Db     392 TTTGCAGTAGATGTTTGGCCTGCAAATGATGATATGGATTCATATCGTTATTATACTATT 333

Qy     301 tatcgctataacttcatcaataccccattttatgccaagggcaaattaggcattgct 357
           |  | || | | || | || | |  || ||     |||| || |  ||    |  ||
Db     332 TTGCCCTTTTAATTTACCAGTCCTTCAGTTGTCTNCAAGAGCTACGTATTTCTNCCT 276


Search completed: August  8, 2002, 20:13:48
Job time: 3881 sec
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GenCore version 4.5


OM protein - protein search, using sw model

Run on: August 7, 2002, 17:10:09 ; Search time 20.67 Seconds
(without alignments)
212.705 Million cell updates/sec

Title: US-09-164-714-7
Perfect score: 912
Sequence: 1 MKTLKTLLAVSASSLLAMSA.....SYNYLSEDANAISLGAHLAF 180

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_AA:*
1: /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | % Query Match | Length | DB | ID | Description |
|---|---|---|---|---|---|---|
| 1 | 113 | 12.4 | 359 | 1 | US-08-457-997B-2 | Sequence 2, Appli |
| 2 | 113 | 12.4 | 359 | 3 | US-08-467-722A-2 | Sequence 2, Appli |
| 3 | 112.5 | 12.3 | 361 | 4 | US-08-096-181A-8 | Sequence 8, Appli |
| 4 | 112.5 | 12.3 | 361 | 5 | PCT-US94-08326-8 | Sequence 8, Appli |
| 5 | 108 | 11.8 | 188 | 1 | US-08-286-767-3 | Sequence 3, Appli |
| 6 | 106.5 | 11.7 | 568 | 5 | PCT-US95-13749-5 | Sequence 5, Appli |
| 7 | 105.5 | 11.6 | 338 | 1 | US-08-210-394-1 | Sequence 1, Appli |
| 8 | 103 | 11.3 | 188 | 1 | US-08-486-715-5 | Sequence 5, Appli |
| 9 | 103 | 11.3 | 188 | 1 | US-08-486-719-5 | Sequence 5, Appli |
| 10 | 103 | 11.3 | 188 | 1 | US-08-476-100-5 | Sequence 5, Appli |
| 11 | 103 | 11.3 | 188 | 3 | US-08-475-749-5 | Sequence 5, Appli |
| 12 | 100 | 11.0 | 1287 | 1 | US-08-200-232-2 | Sequence 2, Appli |
| 13 | 100 | 11.0 | 1287 | 5 | PCT-US95-02219-2 | Sequence 2, Appli |
| 14 | 100 | 11.0 | 1287 | 5 | PCT-US95-02219A-2 | Sequence 2, Appli |
| 15 | 90 | 9.9 | 1296 | 3 | US-08-470-260-3 | Sequence 3, Appli |
| 16 | 90 | 9.9 | 1296 | 3 | US-08-471-491-3 | Sequence 3, Appli |
| 17 | 90 | 9.9 | 1296 | 4 | US-08-466-662-3 | Sequence 3, Appli |
| 18 | 88.5 | 9.7 | 174 | 4 | US-08-913-362-2 | Sequence 2, Appli |
| 19 | 87.5 | 9.6 | 363 | 4 | US-08-096-181A-10 | Sequence 10, Appl |
| 20 | 87.5 | 9.6 | 363 | 5 | PCT-US94-08326-10 | Sequence 10, Appl |
| 21 | 84 | 9.2 | 174 | 4 | US-08-913-362-6 | Sequence 6, Appli |
| 22 | 83.5 | 9.2 | 455 | 2 | US-08-472-172-4 | Sequence 4, Appli |
| 23 | 83 | 9.1 | 759 | 2 | US-08-450-351-2 | Sequence 2, Appli |
| 24 | 83 | 9.1 | 759 | 2 | US-08-450-351-4 | Sequence 4, Appli |
| 25 | 83 | 9.1 | 2048 | 4 | US-09-268-347-48 | Sequence 48, Appl |
| 26 | 80.5 | 8.8 | 342 | 4 | US-08-096-181A-12 | Sequence 12, Appl |
| 27 | 80.5 | 8.8 | 342 | 4 | US-08-096-181A-14 | Sequence 14, Appl |
| 28 | 80.5 | 8.8 | 342 | 5 | PCT-US94-08326-12 | Sequence 12, Appl |
| 29 | 80.5 | 8.8 | 342 | 5 | PCT-US94-08326-14 | Sequence 14, Appl |
| 30 | 80.5 | 8.8 | 1612 | 1 | US-08-169-927-2 | Sequence 2, Appli |
| 31 | 79.5 | 8.7 | 175 | 4 | US-08-913-362-4 | Sequence 4, Appli |
| 32 | 76.5 | 8.4 | 619 | 3 | US-08-262-220-6 | Sequence 6, Appli |
| 33 | 76.5 | 8.4 | 619 | 3 | US-08-471-733-6 | Sequence 6, Appli |
| 34 | 76.5 | 8.4 | 619 | 3 | US-08-468-878-6 | Sequence 6, Appli |
| 35 | 76.5 | 8.4 | 619 | 4 | US-08-750-494-6 | Sequence 6, Appli |
| 36 | 76 | 8.3 | 518 | 3 | US-09-043-123-2 | Sequence 2, Appli |
| 37 | 76 | 8.3 | 2123 | 4 | US-08-968-685A-10 | Sequence 10, Appl |
| 38 | 75.5 | 8.3 | 175 | 4 | US-08-913-362-30 | Sequence 30, Appl |
| 39 | 75.5 | 8.3 | 663 | 1 | US-08-765-081-7 | Sequence 7, Appli |
| 40 | 75.5 | 8.3 | 663 | 3 | US-09-098-082-7 | Sequence 7, Appli |
| 41 | 74.5 | 8.2 | 545 | 4 | US-09-066-046-39 | Sequence 39, Appl |
| 42 | 74.5 | 8.2 | 792 | 3 | US-08-433-522A-8 | Sequence 8, Appli |
| 43 | 74.5 | 8.2 | 792 | 3 | US-09-135-166-8 | Sequence 8, Appli |
| 44 | 74.5 | 8.2 | 792 | 4 | US-08-942-046-8 | Sequence 8, Appli |
| 45 | 74.5 | 8.2 | 1394 | 4 | US-08-296-791-2 | Sequence 2, Appli |

ALIGNMENTS

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RESULT   1
US-08-457-997B-2
; Sequence 2, Application US/08457997B
; Patent No. 5766608
;  GENERAL INFORMATION:
;    APPLICANT:  Kolattukudy, P. E.
;    TITLE OF INVENTION:  Otitis Media Vaccine
;    NUMBER OF SEQUENCES:  6
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Calfee, Halter and Griswold
;      STREET:  Suite 1800 800 Superior Avenue
;      CITY:  Cleveland
;      STATE:  Ohio
;      COUNTRY:  U.S.A.
;      ZIP:  44114-2688
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/457,997B
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Golrick, Mary E.
;      REGISTRATION NUMBER:  34,829
;      REFERENCE/DOCKET NUMBER:  22727/00102
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (216) 622-8458
;      TELEFAX:  (216) 241-0816
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  359 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-457-997B-2


  Query Match             12.4%;  Score 113;  DB 1;  Length 359;
  Best Local Similarity   28.2%;  Pred. No. 0.0002;
  Matches   55;  Conservative   18;  Mismatches   80;  Indels   42;  Gaps   11;

Qy       5 KTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQ---VDAKQING---------- 50
           || :|:  : | | |   |    |:     | | | ||    |    ||
Db       3 KTAIALVVAGLAAASVAQAAPQENTF----YAGVKAGQGSFHDGINNNGAIKKGLSSSNY 58

Qy      51 ---KNT-AYGIYAGYNF--DQNFGVEAEFVGSD---AKEFNAGVSPVKGDVKSFGAY--- 98
              :||  ||:: ||      |||: ||    |   ||   ||    |    : |||
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Db     59 GYRRNTFTYGVFGGYQILNQDNFGLAAELGYDDFGRAKLREAGKPKAKH--TNHGAYLSL 116

Qy     99 -GTYRYNFINTPFYAKGKLGIAKTKVD---VTSRNATTYSNKSDKTSLAGG---VGVGFK 151
          |:|    :       || |:|  : |       | |    |   |: | |   ||  :
Db    117 KGSYE---VLDGLDVYGKAGVALVRSDYKFYEDANGTRDHKKGRHTARASGLFAVGAEYA 173

Qy    152 PLANVGVEASYNYLS 166
          |  : |   | :|:
Db    174 VLPELAVRLEYQWLT 188


RESULT   2
US-08-467-722A-2
; Sequence 2, Application US/08467722A
; Patent No. 6030626
;  GENERAL INFORMATION:
;    APPLICANT:  Kolattukudy, P. E.
;    TITLE OF INVENTION:  Otitis Media Vaccine
;    NUMBER OF SEQUENCES:  6
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Calfee, Halter and Griswold
;      STREET:  Suite 1800 800 Superior Avenue
;      CITY:  Cleveland
;      STATE:  Ohio
;      COUNTRY:  U.S.A>
;      ZIP:  44114-2688
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/467,722A
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Golrick, Mary E.
;      REGISTRATION NUMBER:  34,829
;      REFERENCE/DOCKET NUMBER:  22727/00102
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (216) 622-8458
;      TELEFAX:  (216) 241-0816
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  359 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-467-722A-2


  Query Match             12.4%;  Score 113;  DB 3;  Length 359;
  Best Local Similarity   28.2%;  Pred. No. 0.0002;
  Matches   55;  Conservative   18;  Mismatches   80;  Indels   42;  Gaps   11;

Qy      5 KTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQ---VDAKQING---------- 50
          || :|:  : | | |   |    |:     | | | ||    |    ||
Db      3 KTAIALVVAGLAAASVAQAAPQENTF----YAGVKAGQGSFHDGINNNGAIKKGLSSSNY 58

Qy     51 ---KNT-AYGIYAGYNF--DQNFGVEAEFVGSD---AKEFNAGVSPVKGDVKSFGAY--- 98
             :|  ||:: ||      |||: ||    |   ||   ||    |    : |||
Db     59 GYRRNTFTYGVFGGYQILNQDNFGLAAELGYDDFGRAKLREAGKPKAKH--TNHGAYLSL 116

Qy     99 -GTYRYNFINTPFYAKGKLGIAKTKVD---VTSRNATTYSNKSDKTSLAGG---VGVGFK 151
          |:|    :       || |:|  : |       | |    |   |: | |   ||  :
Db    117 KGSYE---VLDGLDVYGKAGVALVRSDYKFYEDANGTRDHKKGRHTARASGLFAVGAEYA 173

Qy    152 PLANVGVEASYNYLS 166
          |  : |   | :|:
Db    174 VLPELAVRLEYQWLT 188


RESULT   3
US-08-096-181A-8
; Sequence 8, Application US/08096181A
; Patent No. 6153406
;  GENERAL INFORMATION:
;    APPLICANT:  Tai, Joseph Y.
;    APPLICANT:  Pullen, Jeffrey K.
;    APPLICANT:  Soper, Thomas S.
;    APPLICANT:  Liang, Shu-Mei
;    TITLE OF INVENTION:  A Method For The High Level Expression,
;    TITLE OF INVENTION:  Purification And Refolding Of The Outer Membrane Protein
;    TITLE OF INVENTION:  P2 From Haemophilus Influenzae Type b
;    NUMBER OF SEQUENCES:  14
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Sterne, Kessler, Goldstein & Fox
;      STREET:  1100 New York Avenue, Suite 600
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  U.S.A.
;      ZIP:  20005-3934
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/096,181A
;      FILING DATE:  23-Jul-1993
;      CLASSIFICATION:  424
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202) 371-2600
;      TELEFAX:  (202) 371-2540
;  INFORMATION FOR SEQ ID NO:  8:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  361 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-096-181A-8


  Query Match             12.3%;  Score 112.5;  DB 4;  Length 361;
  Best Local Similarity   28.1%;  Pred. No. 0.00022;
  Matches   52;  Conservative   25;  Mismatches   65;  Indels   43;  Gaps   11;

Qy      5 KTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQV---------DAKQING----K 51
          ||| |:   :  | :|||: | |       :| ::  :         : || :|    :
Db      3 KTLAALIVGAFAASAANAAVVYNNEG-TNVELGGRLSIIAEQSNSTVDNQKQQHGALRNQ 61

Qy     52 NTAYGIYAGYNFDQNF----GVEAEFV------GSDAKEFNAGVSPVKGDVKSFGAYGTY 101
           : : | | :||   |     :|  ||      |||   |       ||: |      |
Db     62 GSRFHIKATHNFGDGFYAQGYLETRFVTKASENGSD--NF--------GDITS-----KY 106

Qy    102 RYNFINTPFYAKGKLGIAKTKVD-VTSRNATTYS--NKSDKTSLAGG-VGVGFKPLANVG 157
           |  :    : : ||| |||  | :||     |   | ||    :|  ||  || :  :
Db    107 AYVTLGNKAFGEVKLGRAKTIADGITSAEDKEYGVLNNSDYIPTSGNTVGYTFKGIDGLV 166

Qy    158 VEASY 162
          : |:|
Db    167 LGANY 171


RESULT   4
PCT-US94-08326-8
; Sequence 8, Application PC/TUS9408326
;  GENERAL INFORMATION:
;    APPLICANT:  North American Vaccine, Inc.
;    APPLICANT:  12103 Indian Creek Court
;    APPLICANT:  Beltsville, MD 20705
;    APPLICANT:  Pullen, Jeffrey K.
;    APPLICANT:  Soper, Thomas S.
;    APPLICANT:  Liang, Shu-Mei
;    TITLE OF INVENTION:  A Method For The High Level
;    TITLE OF INVENTION:  Expression,
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;    TITLE OF INVENTION:  Purification And Refolding Of The Outer Membrane
;    TITLE OF INVENTION:  Protein
;    TITLE OF INVENTION:  P2 From Haemophilus Influenzae Type b
;    NUMBER OF SEQUENCES:  14
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Sterne, Kessler, Goldstein & Fox
;      STREET:  1100 New York Avenue, Suite 600
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  U.S.A.
;      ZIP:  20005-3934
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US94/08326
;      FILING DATE:  Herewith
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/096,181
;      FILING DATE:  23-JULY-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Esmond, Robert W.
;      REFERENCE/DOCKET NUMBER:  1438.001PC01
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202) 371-2600
;      TELEFAX:  (202) 371-2540
;  INFORMATION FOR SEQ ID NO:  8:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  361 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
PCT-US94-08326-8


  Query Match             12.3%;  Score 112.5;  DB 5;  Length 361;
  Best Local Similarity   28.1%;  Pred. No. 0.00022;
  Matches   52;  Conservative   25;  Mismatches   65;  Indels   43;  Gaps   11;

Qy       5 KTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQV---------DAKQING----K 51
           ||| |:   :  | :||||: | |       :| ::  :         : || :|    :
Db       3 KTLAALIVGAFAASAANAAVVYNNEG-TNVELGGRLSIIAEQSNSTVDNQKQQHGALRNQ 61

Qy      52 NTAYGIYAGYNFDQNF----GVEAEFV------GSDAKEFNAGVSPVKGDVKSFGAYGTY 101
             : : | | :||   |     :|  ||      |||   |          ||: |     |
Db      62 GSRFHIKATHNFGDGFYAQGYLETRFVTKASENGSD--NF--------GDITS-----KY 106

Qy     102 RYNFINTPFYAKGKLGIAKTKVD-VTSRNATTYS--NKSDKTSLAGG-VGVGFKPLANVG 157
             |  :    : : ||| |||  | :||     |   | ||    :|  ||  || :  :
Db     107 AYVTLGNKAFGEVKLGRAKTIADGITSAEDKEYGVLNNSDYIPTSGNTVGYTFKGIDGLV 166

Qy     158 VEASY 162
           : |:|
Db     167 LGANY 171


RESULT   5
US-08-286-767-3
; Sequence 3, Application US/08286767
; Patent No. 5733760
;  GENERAL INFORMATION:
;    APPLICANT:  Lu, Yichen
;    APPLICANT:  Miller, Samuel I.
;    APPLICANT:  Killeen, Kevin
;    TITLE OF INVENTION:  SALMONELLA VECTORS ENCODING TRUNCATED
;    TITLE OF INVENTION:  PagC FUSION PROTEIN, METHOD OF MAKING, AND USES THERETO
;    NUMBER OF SEQUENCES:  5
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  RONALD I. EISENSTEIN; DIKE, BRONSTEIN,
;      ADDRESSEE:  ROBERTS & CUSHMAN
;      STREET:  130 Water Street
;      CITY:  Boston
;      STATE:  Massachusetts
;      COUNTRY:  US
;      ZIP:  02109
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/286,767
;      FILING DATE:  05-AUG-1994
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Resnick, David S.
;      REGISTRATION NUMBER:  34235
;      REFERENCE/DOCKET NUMBER:  44420
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 523-3400
;      TELEFAX:  (617) 523-6400
;      TELEX:  200291 STRE UR
;  INFORMATION FOR SEQ ID NO:  3:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  188 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-286-767-3


  Query Match             11.8%;  Score 108;  DB 1;  Length 188;
  Best Local Similarity   24.2%;  Pred. No. 0.00028;
  Matches   50;  Conservative   29;  Mismatches   82;  Indels   46;  Gaps    8;

Qy       1 MKTLKTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQVDAKQINGKNTAYGIYAG 60
           || :     |  :|:| ::   | :   |     |  :|:   | | | | |  |
Db       1 MKNIILSTLVITTSVLVVNVAQADTNAFSVGYARYAQSKV--QDFKNIRGVNVKY----- 53

Qy      61 YNFDQNFGVEAEFVGSDAKEFNAGVSPVKGDVKSFGA---------------YGT----- 100
                      :       | : :| : || :: |:               ||:
Db      54 ----------RYEDDSPVSFISSLSYLYGDRQASGSVEPEGIHYHDKFEVKYGSLMVGP 102

Qy     101 -YRYNFINTPFYAKGKLGIAK-TKVDVTSRNATTYSNK--SDKTSLAGGVGVGFKPLANV 156
            || :  |   ||   :|  | |  : :::: ::|||  | ||  | | ||   || |:
Db     103 AYRLS-DNFSLYALAGVGTVKATFKEHSTQDGDSFSNKISSRKTGFAWGAGVQMNPLENI 161

Qy     157 GVEASY---NYLSEDANAISLGAHLAF 180
             |:  |   |  |   |  ::|    |
Db     162 VVDVGYEGSNISSTKINGFNVGVGYRF 188


RESULT   6
PCT-US95-13749-5
; Sequence 5, Application PC/TUS9513749
;  GENERAL INFORMATION:
;    APPLICANT:  Amgen Inc.
;    TITLE OF INVENTION:  COMPOSITIONS FOR INCREASED
;    TITLE OF INVENTION:  BIOAVAILABILITY OF ORALLY DELIVERED THERAPEUTIC AGENTS
;    NUMBER OF SEQUENCES:  5
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Amgen Inc.
;      STREET:  1840 Dehavilland Drive
;      CITY:  Thousand Oaks
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  91320-1789
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
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;      APPLICATION NUMBER:  PCT/US95/13749
;      FILING DATE:
;      CLASSIFICATION:
;   INFORMATION FOR SEQ ID NO:  5:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  568 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  unknown
;       TOPOLOGY:  unknown
;     MOLECULE TYPE:  protein
PCT-US95-13749-5


  Query Match             11.7%;  Score 106.5;  DB 5;  Length 568;
  Best Local Similarity   30.1%;  Pred. No. 0.0019;
  Matches   55;  Conservative   19;  Mismatches   72;  Indels   37;  Gaps   10;

Qy      10 VSASSLLAMSANAAISY----GNSADAQPYVGAKIGQVDAKQINGKNTAYGIYAGYNFDQ 65
           | |:|  ::|   | |:    | : |  |                | |  |     |  |
Db     411 VYAASESSISIGYAQSHVKENGYTLDNDP-------------KGFNLKY----RYELDD 452

Qy      66 NFGVEAEFVGS-DAKEFNAGVSPV-KGDVKSFGAYGTYRYNF-INTPFYAKGKLGIAKTK 122
           |:||   |  :    :|  | :    |||  :    |   :| ||      | || |  |
Db     453 NWGVIGSFAYTHQGYDFFYGSNKFGHGDVDYYSV--TMGPSFRINEYVSLYGLLGAAHGK 510

Qy     123 VDVTSRNATTY--SNKSDKTSLAGGVGVGFKPLANVGVEASYNYLSEDANAIS---LGAH 177
           |      |: :  |  : |||:| | || | || |  ::||| |   |:  :    |||
Db     511 V-----KASVFDESISASKTSMAYGAGVQFNPLPNFVIDASYEYSKLDSIKVGTWMLGAG 565

Qy     178 LAF 180
           |
Db     566 YRF 568


RESULT   7
US-08-210-394-1
; Sequence 1, Application US/08210394
; Patent No. 5770213
;  GENERAL INFORMATION:
;    APPLICANT:  Zlotnick Dr., Gary W.
;    TITLE OF INVENTION:  Purified No. 5770213typable Haemophilus
;    TITLE OF INVENTION:  influenzae P5 Protein as a Vaccine for No. 5770213typable
;    TITLE OF INVENTION:  Haemophilus Influenzae Strain
;    NUMBER OF SEQUENCES:  1
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  American Cyanamid Company
;      STREET:  One Cyanamid Plaza
;      CITY:  Wayne
;      STATE:  New Jersey
;      COUNTRY:  US
;      ZIP:  07470-8426
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/210,394
;      FILING DATE:  07-MAR-1994
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Harrington, James J
;      REFERENCE/DOCKET NUMBER:  32,144
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  201/831-3246
;      TELEFAX:  201/831-3305
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  338 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    MOLECULE TYPE:  protein
US-08-210-394-1


  Query Match             11.6%;  Score 105.5;  DB 1;  Length 338;
  Best Local Similarity   25.6%;  Pred. No. 0.0012;
  Matches   50;  Conservative   17;  Mismatches   65;  Indels   63;  Gaps   11;

Qy      35 YVGAKIGQ---VDAKQING---------------KNT-AYGIYAGYNF--DQNFGVEAE 72
           | | | ||    |    ||                 :||  ||:: ||      |||: ||
Db       8 YAGVKAGQGSFHDGINNNGAIKEDSIDLTLGYGYRRNTFTYGVFGGYQILNQDNFGLAAE 67

Qy      73 FVGSD-------------AKEFNAGVS-PVKGDVKSFGAYGTYRYNFINTPFYAKGKLG 117
           :| |               ||  | |    :||  :       |            || |
Db      68 -LGYDNFGRVKFRAEGKTKAKHTNHGAHLSLKGSYEVLDGLDVY-----------GKAG 114

Qy     118 IAKTKVD---VTSRNATTYSNKSDKTSLAGG---VGVGFKPLANVGVEASY-------NY 164
           :|  : |     : |:|    |   |: | |   ||  :  |  : |   |         |
Db     115 VALVRSDYKFYEAPNSTRDXKKGTHTARASGLFAVGAEYAVLPELAVRLEYQQLTRVGKY 174

Qy     165 LSEDANAISLGAHLA 179
           :| || |:  : |
Db     175 RPQDKNAPSINPNTA 189


RESULT   8
US-08-486-715-5
; Sequence 5, Application US/08486715
; Patent No. 5674724
;  GENERAL INFORMATION:
;    APPLICANT:  Miller, Samuel I.
;    TITLE OF INVENTION:  SALMONELLA VIRULENCE GENES
;    NUMBER OF SEQUENCES:  5
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P. C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  Massachusetts
;      COUNTRY:  U.S.A.
;      ZIP:  02110-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      COMPUTER:  IBM PS/2 Model 50Z or 55SX
;      OPERATING SYSTEM:  MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/486,715
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/090,526
;      FILING DATE:  09-JUL-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/629,602
;      FILING DATE:  18-DEC-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/192005
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 542-5070
;      TELEFAX:  (617) 542-8906
;      TELEX:  200154
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  188 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  not relevant
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-486-715-5


  Query Match             11.3%;  Score 103;  DB 1;  Length 188;
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  Best Local Similarity   27.0%;  Pred. No. 0.001;
  Matches   53;  Conservative   28;  Mismatches   91;  Indels   24;  Gaps   10;

Qy       1 MKTLKTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQVDAKQINGKNTAYGIYAG 60
           || :     |  :|:| ::   | :   |     |  :|:   | | | | |  |
Db       1 MKNIILSTLVITTSVLVVNVAQADTNAFSVGYARYAQSKV--QDFKNIRGVNVKY----R 54

Qy      61 YNFDQ--NFGVEAEFVGSDAKEFNAGVSPV------KGDVK--SFGAYGTYRYNFINTPF 110
           |  |   :|     ::  | :: :  | |       | :||  |       || :  |
Db      55 YEDDSPVSFISSLSYLYGD-RQASGSVEPEGIHYHDKFEVKXGSLMVGPAYRLS-DNFSL 112

Qy     111 YAKGKLGIAK-TKVDVTSRNATTYSNK--SDKTSLAGGVGVGFKPLANVGVEASY---NY 164
           ||   :|  | |  : ::::  ::|||  | ||  | | ||   || |: |:  |   |
Db     113 YALAGVGTVKATFKEHSTQDGDSFSNKISSRKTGFAWGAGVQMNPLENIVVDVGYEGSNI 172

Qy     165 LSEDANAISLGAHLAF 180
           |   |  ::|    |
Db     173 SSTKINGFNVGVGYRF 188


RESULT   9
US-08-486-719-5
; Sequence 5, Application US/08486719
; Patent No. 5674736
;  GENERAL INFORMATION:
;    APPLICANT:  Miller, Samuel I.
;    TITLE OF INVENTION:  SALMONELLA VIRULENCE GENES
;    NUMBER OF SEQUENCES:  5
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P. C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  Massachusetts
;      COUNTRY:  U.S.A.
;      ZIP:  02110-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      COMPUTER:  IBM PS/2 Model 50Z or 55SX
;      OPERATING SYSTEM:  MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/486,719
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/090,526
;      FILING DATE:  09-JUL-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/629,602
;      FILING DATE:  18-DEC-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/192002
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 542-5070
;      TELEFAX:  (617) 542-8906
;      TELEX:  200154
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  188 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  not relevant
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-486-719-5


  Query Match             11.3%;  Score 103;  DB 1;  Length 188;
  Best Local Similarity   27.0%;  Pred. No. 0.001;
  Matches   53;  Conservative   28;  Mismatches   91;  Indels   24;  Gaps   10;

Qy       1 MKTLKTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQVDAKQINGKNTAYGIYAG 60
           || :     |  :|:| ::   | :   |     |  :|:   | | | | |  |
Db       1 MKNIILSTLVITTSVLVVNVAQADTNAFSVGYARYAQSKV--QDFKNIRGVNVKY----R 54

Qy      61 YNFDQ--NFGVEAEFVGSDAKEFNAGVSPV------KGDVK--SFGAYGTYRYNFINTPF 110
           |  |   :|     ::  | :: :  | |       | :||  |       || :  |
Db      55 YEDDSPVSFISSLSYLYGD-RQASGSVEPEGIHYHDKFEVKXGSLMVGPAYRLS-DNFSL 112

Qy     111 YAKGKLGIAK-TKVDVTSRNATTYSNK--SDKTSLAGGVGVGFKPLANVGVEASY---NY 164
           ||   :|  | |  : ::::  ::|||  | ||  | | ||   || |: |:  |   |
Db     113 YALAGVGTVKATFKEHSTQDGDSFSNKISSRKTGFAWGAGVQMNPLENIVVDVGYEGSNI 172

Qy     165 LSEDANAISLGAHLAF 180
           |   |  ::|    |
Db     173 SSTKINGFNVGVGYRF 188


RESULT  10
US-08-476-100-5
; Sequence 5, Application US/08476100
; Patent No. 5731196
;  GENERAL INFORMATION:
;    APPLICANT:  Miller, Samuel I., III
;    APPLICANT:  Mekalanos, John J.
;    TITLE OF INVENTION:  SALMONELLA VIRULENCE GENES
;    NUMBER OF SEQUENCES:  5
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P. C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  Massachusetts
;      COUNTRY:  U.S.A.
;      ZIP:  02110-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      COMPUTER:  IBM PS/2 Model 50Z or 55SX
;      OPERATING SYSTEM:  MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/476,100
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/090,526
;      FILING DATE:  09-JUL-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/629,602
;      FILING DATE:  18-DEC-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/192003
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 542-5070
;      TELEFAX:  (617) 542-8906
;      TELEX:  200154
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  188 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  not relevant
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-476-100-5


  Query Match             11.3%;  Score 103;  DB 1;  Length 188;
  Best Local Similarity   27.0%;  Pred. No. 0.001;
  Matches   53;  Conservative   28;  Mismatches   91;  Indels   24;  Gaps   10;

Qy       1 MKTLKTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQVDAKQINGKNTAYGIYAG 60
           || :     |  :|:| ::   | :   |     |  :|:   | | | | |  |
Db       1 MKNIILSTLVITTSVLVVNVAQADTNAFSVGYARYAQSKV--QDFKNIRGVNVKY----R 54
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Qy      61 YNFDQ--NFGVEAEFVGSDAKEFNAGVSPV------KGDVK--SFGAYGTYRYNFINTPF 110
           |  |   :|     ::  | :: :  | |       | :||  |       || :  |
Db      55 YEDDSPVSFISSLSYLYGD-RQASGSVEPEGIHYHDKFEVKXGSLMVGPAYRLS-DNFSL 112

Qy     111 YAKGKLGIAK-TKVDVTSRNATTYSNK--SDKTSLAGGVGVGFKPLANVGVEASY---NY 164
           ||   :|  | |  : ::::  ::|||  | ||  | | ||   || |: |:  |   |
Db     113 YALAGVGTVKATFKEHSTQDGDSFSNKISSRKTGFAWGAGVQMNPLENIVVDVGYEGSNI 172

Qy     165 LSEDANAISLGAHLAF 180
           |   |  ::|    |
Db     173 SSTKINGFNVGVGYRF 188


RESULT  11
US-08-475-749-5
; Sequence 5, Application US/08475749
; Patent No. 6010901
;  GENERAL INFORMATION:
;    APPLICANT:  Miller III, Samuel I.
;    APPLICANT:  Mekalanos, John L.
;    TITLE OF INVENTION:  SALMONELLA VIRULENCE GENES
;    NUMBER OF SEQUENCES:  5
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P. C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  Massachusetts
;      COUNTRY:  U.S.A.
;      ZIP:  02110-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      COMPUTER:  IBM PS/2 Model 50Z or 55SX
;      OPERATING SYSTEM:  MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/475,749
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/090,526
;      FILING DATE:  09-JUL-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/629,602
;      FILING DATE:  18-DEC-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/192004
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 542-5070
;      TELEFAX:  (617) 542-8906
;      TELEX:  200154
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  188 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  not relevant
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-475-749-5


  Query Match             11.3%;  Score 103;  DB 3;  Length 188;
  Best Local Similarity   27.0%;  Pred. No. 0.001;
  Matches   53;  Conservative   28;  Mismatches   91;  Indels   24;  Gaps   10;

Qy       1 MKTLKTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQVDAKQINGKNTAYGIYAG 60
           || :     |  :|:| ::   | :   |    |  :|:   | | | | | |
Db       1 MKNIILSTLVITTSVLVVNVAQADTNAFSVGYARYAQSKV--QDFKNIRGVNVKY----R 54

Qy      61 YNFDQ--NFGVEAEFVGSDAKEFNAGVSPV------KGDVK--SFGAYGTYRYNFINTPF 110
           |  |   :|     ::  | :: :  | |       | :||  |       || :  |
Db      55 YEDDSPVSFISSLSYLYGD-RQASGSVEPEGIHYHDKFEVKXGSLMVGPAYRLS-DNFSL 112

Qy     111 YAKGKLGIAK-TKVDVTSRNATTYSNK--SDKTSLAGGVGVGFKPLANVGVEASY---NY 164
           ||   :|  | |  : ::::  ::|||  | ||  | | ||   || |: |:  |   |
Db     113 YALAGVGTVKATFKEHSTQDGDSFSNKISSRKTGFAWGAGVQMNPLENIVVDVGYEGSNI 172

Qy     165 LSEDANAISLGAHLAF 180
           |   |  ::|    |
Db     173 SSTKINGFNVGVGYRF 188


RESULT  12
US-08-200-232-2
; Sequence 2, Application US/08200232
; Patent No. 5721349
;  GENERAL INFORMATION:
;    APPLICANT:  Cover, Timothy L.
;    APPLICANT:  Blaser, Martin J.
;    TITLE OF INVENTION:  VACUOLATING TOXIN-DEFICIENT H. PYLORI
;    TITLE OF INVENTION:  AND RELATED METHODS
;    NUMBER OF SEQUENCES:  18
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  NEEDLE & ROSENBERG P.C.
;      STREET:  127 Peachtree Street, Suite 1200
;      CITY:  Atlanta
;      STATE:  Georgia
;      COUNTRY:  USA
;      ZIP:  30303
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/200,232
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Spratt, Gwendolyn D.
;      REGISTRATION NUMBER:  36,016
;      REFERENCE/DOCKET NUMBER:  2200.023
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  404/688-0770
;      TELEFAX:  404/688-9880
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1287 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-200-232-2


  Query Match             11.0%;  Score 100;  DB 1;  Length 1287;
  Best Local Similarity   24.8%;  Pred. No. 0.031;
  Matches   53;  Conservative   32;  Mismatches   71;  Indels   58;  Gaps   12;

Qy       9 AVSASSLLAMSANAAISYGNSADAQPYVGAKIGQVDA----------KQIN----- 49
           |:  :| |    ||:: || ||    |:    |||:|              | |
Db    1025 AIGGAS-LNNGGNASL-YGTSAGVDAYLN---GQVEAIVGGFGSYGYSSFNNQANSLNSG 1079

Qy      50 GKNTAYGIYAGYNFDQN-FGVEAE-FVGSDAKEFNAGVSPVKGDVKSF----------GA 97
             || :|:|:    :|: |  ||:  :|||    |   : ::   :|:          :
Db    1080 ANNTNFGVYSRIFANQHEFDFEAQGALGSDQSSLNFKSALLRDLNQSYNYLAYSAATRAS 1139

Qy      98 YGTYRYNFINTPFYAKGKLGIAKTKVDVTSRNATTYSNKSDKTSLAGGVGVGFKPLANVG 157
           || | : |       |  :|::   :  |:      || ::| :|: |        |:
Db    1140 YG-YDFAFFRNALVLKPSVGVSYNHLGSTNFK----SNSTNKVALSNGSSSQHLFNASAN 1194

Qy     158 VEASYNY-----------LSE-----DANAISL 174
           ||| | |            | |      :||:||
Db    1195 VEARYYYGDTSYFYMNAGVLQEFANFGSSNAVSL 1228
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RESULT 13
PCT-US95-02219-2
; Sequence 2, Application PC/TUS9502219
;  GENERAL INFORMATION:
;    APPLICANT:  Cover, Timothy L.
;    APPLICANT:  Blaser, Martin J.
;    TITLE OF INVENTION:  VACUOLATING TOXIN-DEFICIENT H. PYLORI
;    TITLE OF INVENTION:  AND RELATED METHODS
;    NUMBER OF SEQUENCES:  18
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  NEEDLE & ROSENBERG P.C.
;      STREET:  127 Peachtree Street, Suite 1200
;      CITY:  Atlanta
;      STATE:  Georgia
;      COUNTRY:  USA
;      ZIP:  30303
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/02219
;      FILING DATE:
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Spratt, Gwendolyn D.
;      REGISTRATION NUMBER:  36,016
;      REFERENCE/DOCKET NUMBER:  2200.023
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  404/688-0770
;      TELEFAX:  404/688-9880
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1287 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
PCT-US95-02219-2


  Query Match             11.0%;  Score 100;  DB 5;  Length 1287;
  Best Local Similarity   24.8%;  Pred. No. 0.031;
  Matches   53;  Conservative   32;  Mismatches   71;  Indels   58;  Gaps   12;

Qy       9 AVSASSLLAMSANAAISYGNSADAQPYVGAKIGQVDA--------------KQIN----- 49
           |:  :| |    ||:: || ||    |:    |||:|               | |
Db    1025 AIGGAS-LNNGGNASL-YGTSAGVDAYLN---GQVEAIVGGFGSYGYSSFNNQANSLNSG 1079

Qy      50 GKNTAYGIYAGYNFDQN-FGVEAE-FVGSDAKEFNAGVSPVKGDVKSF----------GA 97
             || :|:|:    :|: |  ||:  :|||    |   : ::   :|:           :
Db    1080 ANNTNFGVYSRIFANQHEFDFEAQGALGSDQSSLNFKSALLRDLNQSYNYLAYSAATRAS 1139

Qy      98 YGTYRYNFINTPFYAKGKLGIAKTKVDVTSRNATTYSNKSDKTSLAGGVGVGFKPLANVG 157
           || | : |       |  :|::   :  |:      || ::| :|: |         |:
Db    1140 YG-YDFAFFRNALVLKPSVGVSYNHLGSTNFK----SNSTNKVALSNGSSSQHLFNASAN 1194

Qy     158 VEASYNY------------LSE-----DANAISL 174
           ||| | |             | |      :||:||
Db    1195 VEARYYYGDTSYFYMNAGVLQEFANFGSSNAVSL 1228


RESULT 14
PCT-US95-02219A-2
; Sequence 2, Application PC/TUS9502219A
;  GENERAL INFORMATION:
;    APPLICANT:  Cover, Timothy L.
;    APPLICANT:  Tummuru, Murali KR
;    APPLICANT:  Cao, Ping
;    APPLICANT:  Thompson, Stuart A.
;    APPLICANT:  Blaser, Martin J.
;    TITLE OF INVENTION:  VACUOLATING TOXIN-DEFICIENT H. PYLORI
;    TITLE OF INVENTION:  AND THE RELATED METHODS
;    NUMBER OF SEQUENCES:  19
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  NEEDLE & ROSENBERG P.C.
;      STREET:  127 Peachtree Street, Suite 1200
;      CITY:  Atlanta
;      STATE:  Georgia
;      COUNTRY:  USA
;      ZIP:  30303
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/02219A
;      FILING DATE:
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Spratt, Gwendolyn D.
;      REGISTRATION NUMBER:  36,016
;      REFERENCE/DOCKET NUMBER:  2200.023
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  404/688-0770
;      TELEFAX:  404/688-9880
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1287 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
PCT-US95-02219A-2


  Query Match             11.0%;  Score 100;  DB 5;  Length 1287;
  Best Local Similarity   24.8%;  Pred. No. 0.031;
  Matches   53;  Conservative   32;  Mismatches   71;  Indels   58;  Gaps   12;

Qy       9 AVSASSLLAMSANAAISYGNSADAQPYVGAKIGQVDA--------------KQIN----- 49
           |:  :| |    ||:: || ||    |:    |||:|               | |
Db    1025 AIGGAS-LNNGGNASL-YGTSAGVDAYLN---GQVEAIVGGFGSYGYSSFNNQANSLNSG 1079

Qy      50 GKNTAYGIYAGYNFDQN-FGVEAE-FVGSDAKEFNAGVSPVKGDVKSF----------GA 97
             || :|:|:    :|: |  ||:  :|||    |   : ::   :|:           :
Db    1080 ANNTNFGVYSRIFANQHEFDFEAQGALGSDQSSLNFKSALLRDLNQSYNYLAYSAATRAS 1139

Qy      98 YGTYRYNFINTPFYAKGKLGIAKTKVDVTSRNATTYSNKSDKTSLAGGVGVGFKPLANVG 157
           || | : |       |  :|::   :  |:      || ::| :|: |         |:
Db    1140 YG-YDFAFFRNALVLKPSVGVSYNHLGSTNFK----SNSTNKVALSNGSSSQHLFNASAN 1194

Qy     158 VEASYNY------------LSE-----DANAISL 174
           ||| | |             | |      :||:||
Db    1195 VEARYYYGDTSYFYMNAGVLQEFANFGSSNAVSL 1228


RESULT 15
US-08-470-260-3
; Sequence 3, Application US/08470260
; Patent No. 6077706
;  GENERAL INFORMATION:
;    APPLICANT:  Covacci, Antonello
;    APPLICANT:  Bugnoli, Massimo
;    APPLICANT:  Telford, John
;    APPLICANT:  Macchia, Giovanni
;    APPLICANT:  Rappuoli, Rino
;    TITLE OF INVENTION:  Helicobacter Pylori Proteins Useful
;    TITLE OF INVENTION:  for Vaccines and Diagnostics
;    NUMBER OF SEQUENCES:  7
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Chiron Corporation
;      STREET:  4560 Horton Street
;      CITY:  Emeryville
;      STATE:  California
;      COUNTRY:  USA
```

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;      ZIP:  94608-2916
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/470,260
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/256,848
;      FILING DATE:  21-OCT-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McClung, Barbara G.
;      REGISTRATION NUMBER:  33,113
;      REFERENCE/DOCKET NUMBER:  0316.001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (510) 601-2708
;      TELEFAX:  (510) 655-3542
;  INFORMATION FOR SEQ ID NO:  3:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1296 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-470-260-3


  Query Match             9.9%;  Score 90;  DB 3;  Length 1296;
  Best Local Similarity   27.2%;  Pred. No. 0.39;
  Matches   47;  Conservative   20;  Mismatches   54;  Indels   52;  Gaps   10;

Qy       9 AVSASSLLAMSANAAISYGNSADAQPYVGAKIGQVDAKQINGKNTAYGIYAGYNFDQNFG 68
           |:  :| |   :||:: || ||    |:    |||:|  | |   :|| |: :|
Db    1034 AIGGTS-LNNGSNASL-YGTSAGVDAYLN---GQVEA--IVGGFGSYG-YSSFN------ 1079

Qy      69 VEAEFVGSDAKEFNAGVSPVKGDVKSFGAYGTYRYNFINTPFYAKGKLGIAKTKVDVTSR 128
             : |   |:| :       :|| |     |     | |:| ||
Db    1080 -------NRANSLNSGANNT-----NFGVYSRIFANQHEFDFEAQGALG---------- 1116

Qy     129 NATTYSNKSDKTSLAGGVGVGFKPLANVGVEASYNYLS-EDANAISLGAHLAF 180
                ||::||       ||      :  ||:||:   |   | |   ||
Db    1117 --------SDQSSL------NFKSALLQDLNQSYHYLAYSAATRASYGYDFAF 1155


Search completed: August  7, 2002, 17:10:11
Job time: 32 sec
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GenCore version 4.5


OM protein - protein search, using sw model

Run on: August 7, 2002, 17:10:55 ; Search time 39.64 Seconds
(without alignments)
702.641 Million cell updates/sec

Title: US-09-164-714-7
Perfect score: 912
Sequence: 1 MKTLKTLLAVSASSLLAMSA.....SYNYLSEDANAISLGAHLAF 180

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 475226 seqs, 154737215 residues

Total number of hits satisfying chosen parameters: 475226

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_AA_New:*
1: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep:*
2: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep:*
3: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep:*
4: /cgn2_6/ptodata/2/paa/US08_NEW_COMB.pep:*
5: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep:*
6: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep:*
7: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | % Query Match | Length | DB | ID | Description |
|---|---|---|---|---|---|---|
| 1 | 130 | 14.3 | 369 | 5 | US-09-545-199F-153 | Sequence 153, App |
| 2 | 117 | 12.8 | 572 | 6 | US-10-125-692-11 | Sequence 11, Appl |
| 3 | 101.5 | 11.1 | 364 | 5 | US-09-545-199F-151 | Sequence 151, App |
| 4 | 101.5 | 11.1 | 3971 | 5 | US-09-904-101B-7 | Sequence 7, Appli |
| 5 | 99.5 | 10.9 | 357 | 5 | US-09-120-051C-9 | Sequence 9, Appli |
| 6 | 99.5 | 10.9 | 357 | 5 | US-09-120-051D-9 | Sequence 9, Appli |
| 7 | 97.5 | 10.7 | 1265 | 7 | US-60-360-039-3134 | Sequence 3134, Ap |
| 8 | 90 | 9.9 | 1296 | 5 | US-09-410-835C-3 | Sequence 3, Appli |
| 9 | 88.5 | 9.7 | 174 | 5 | US-09-684-883-2 | Sequence 2, Appli |
| 10 | 86.5 | 9.5 | 427 | 5 | US-09-540-209B-6145 | Sequence 6145, Ap |
| 11 | 84 | 9.2 | 174 | 5 | US-09-684-883-6 | Sequence 6, Appli |
| 12 | 83 | 9.1 | 1833 | 6 | US-10-175-275-4 | Sequence 4, Appli |
| 13 | 83 | 9.1 | 1833 | 6 | US-10-175-282-4 | Sequence 4, Appli |
| 14 | 83 | 9.1 | 1992 | 6 | US-10-031-165-3 | Sequence 3, Appli |
| 15 | 83 | 9.1 | 1992 | 6 | US-10-031-165-13 | Sequence 13, Appl |
| 16 | 83 | 9.1 | 1992 | 6 | US-10-175-275-3 | Sequence 3, Appli |
| 17 | 83 | 9.1 | 1992 | 6 | US-10-175-282-3 | Sequence 3, Appli |
| 18 | 83 | 9.1 | 2047 | 6 | US-10-031-165-4 | Sequence 4, Appli |
| 19 | 83 | 9.1 | 2047 | 6 | US-10-031-165-7 | Sequence 7, Appli |
| 20 | 82 | 9.0 | 2053 | 6 | US-10-031-165-9 | Sequence 9, Appli |
| 21 | 80.5 | 8.8 | 343 | 5 | US-09-120-051C-4 | Sequence 4, Appli |
| 22 | 80.5 | 8.8 | 343 | 5 | US-09-120-051D-4 | Sequence 4, Appli |
| 23 | 80 | 8.8 | 362 | 7 | US-60-360-039-786 | Sequence 786, App |
| 24 | 79.5 | 8.7 | 175 | 5 | US-09-684-883-4 | Sequence 4, Appli |
| 25 | 79.5 | 8.7 | 424 | 6 | US-10-179-131-5337 | Sequence 5337, Ap |
| 26 | 79.5 | 8.7 | 953 | 5 | US-09-935-625-9135 | Sequence 9135, Ap |
| 27 | 79.5 | 8.7 | 1010 | 5 | US-09-935-625-9134 | Sequence 9134, Ap |
| 28 | 78.5 | 8.6 | 669 | 5 | US-09-629-469A-16485 | Sequence 16485, A |
| 29 | 77.5 | 8.5 | 198 | 5 | US-09-540-209B-9654 | Sequence 9654, Ap |
| 30 | 77.5 | 8.5 | 683 | 5 | US-09-620-412C-357 | Sequence 357, App |
| 31 | 77.5 | 8.5 | 1776 | 5 | US-09-620-412C-179 | Sequence 179, App |
| 32 | 76.5 | 8.4 | 217 | 5 | US-09-545-199F-127 | Sequence 127, App |
| 33 | 76.5 | 8.4 | 300 | 7 | US-60-360-039-13596 | Sequence 13596, A |
| 34 | 76.5 | 8.4 | 580 | 1 | PCT-US01-13240-4 | Sequence 4, Appli |
| 35 | 76.5 | 8.4 | 773 | 1 | PCT-US01-13240-6 | Sequence 6, Appli |
| 36 | 76.5 | 8.4 | 848 | 5 | US-09-540-209B-9955 | Sequence 9955, Ap |
| 37 | 76.5 | 8.4 | 1194 | 5 | US-09-935-625-16231 | Sequence 16231, A |
| 38 | 76.5 | 8.4 | 1339 | 5 | US-09-935-625-16230 | Sequence 16230, A |
| 39 | 76.5 | 8.4 | 1345 | 5 | US-09-935-625-16229 | Sequence 16229, A |
| 40 | 76.5 | 8.4 | 3241 | 1 | PCT-US01-13240-1 | Sequence 1, Appli |
| 41 | 76 | 8.3 | 375 | 7 | US-60-360-039-18285 | Sequence 18285, A |
| 42 | 75.5 | 8.3 | 175 | 5 | US-09-684-883-30 | Sequence 30, Appl |
| 43 | 75 | 8.2 | 145 | 5 | US-09-905-176-21 | Sequence 21, Appl |
| 44 | 75 | 8.2 | 353 | 5 | US-09-120-051C-2 | Sequence 2, Appli |
| 45 | 75 | 8.2 | 353 | 5 | US-09-120-051D-2 | Sequence 2, Appli |

ALIGNMENTS

RESULT 1
US-09-545-199F-153
; Sequence 153, Application US/09545199F
; GENERAL INFORMATION:
; APPLICANT: Lowery E., David
; APPLICANT: Fuller E., Troy
; APPLICANT: Kennedy J., Michael
; TITLE OF INVENTION: Anti-Bacterial Vaccine Compositions
; FILE REFERENCE: 28341/6227.NCP
; CURRENT APPLICATION NUMBER: US/09/545,199F
; CURRENT FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: 60/153,453
; PRIOR FILING DATE: 1999-09-10
; PRIOR APPLICATION NUMBER: 60/128,689
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 165
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 153
; LENGTH: 369
; TYPE: PRT
; ORGANISM: Actinobacillus pleuropneumoniae
US-09-545-199F-153

Query Match 14.3%; Score 130; DB 5; Length 369;
Best Local Similarity 25.5%; Pred. No. 2.1e-05;
Matches 50; Conservative 24; Mismatches 76; Indels 46; Gaps 8;

```
Qy      14 SLLAMSANAAISYGNSADAQP--YVGAKIGQVDAKQ----------------------ING 50
           ||:|::  :| :   :|  |   | |||:||                          ||
Db       4 SLVALAVLSAAAVAQAAPQQNTFYAGAKVGQSSFHHGVNQLKSGHDDRYNDKTRKYGINR 63

Qy      51 KNTAYGIYAGYNF--DQNFGVEAEFVGSDAKEFNAGVSPVKGDVKSFGA--YGTYRYNFI 106
             :  ||:: ||       |||: || :| |          |:|:|  |    :  :  |
Db      64 NSVTYGVFGGYQILNQNNFGLAAE-LGYDY------YGRVRGNVDEFRTVKHSAHGLNLA 116

Qy     107 NTPFY-------AKGKLGIAKTKVD-----VTSRNATTYSNKSDKTSLAGGVGVGFKPLA 154
             | |         ||:|||  : |       : | :|      | |   | || :  |
Db     117 LKPSYEVLPDLDVYGKVGIAVVRNDYKKYGAENTNESTTKFHKLKASTILGAGVEYAILP 176

Qy     155 NVGVEASYNYLSEDAN 170
             :     | ||::  |
Db     177 ELAARVEYQYLNKAGN 192
```

RESULT 2
US-10-125-692-11
; Sequence 11, Application US/10125692
; GENERAL INFORMATION:

```
;  APPLICANT: Aderem, Alan
;  APPLICANT:  Hayashi, Fumitaka
;  APPLICANT:  Smith, Kelly D.
;  APPLICANT:  Underhill, David M.
;  APPLICANT:  Ozinsky, Adrian
;  TITLE OF INVENTION: Toll-Like Receptor 5 Ligands and Methods
;  TITLE OF INVENTION:  of Use
;  FILE REFERENCE: P-IS 5155
;  CURRENT APPLICATION NUMBER: US/10/125,692
;  CURRENT FILING DATE:  2002-04-17
;  PRIOR APPLICATION NUMBER: US 60/285,477
;  PRIOR FILING DATE: 2001-04-20
;  NUMBER OF SEQ ID NOS: 43
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 11
;   LENGTH: 572
;   TYPE: PRT
;   ORGANISM: C. jejuni
US-10-125-692-11


  Query Match             12.8%;  Score 117;  DB 6;  Length 572;
  Best Local Similarity   24.5%;  Pred. No. 0.00081;
  Matches   50;  Conservative   24;  Mismatches   70;  Indels   60;  Gaps    7;

Qy      22 AAISYGNSADAQPYVGAKIGQVDAKQ----------INGKNTAYGIYA------------ 59
           ||:  | ::|     | |||:|| |           ||       |: |
Db     242 AAVRAGATSDTFAINGVKIGKVDYKDGDANGALVAAINSVKDTTGVEASIDANGQLLLTS 301

Qy      60 ----GYNFDQNFGVEAEFVGSDAKEFNAGVSPVKGDVK------------SFGAYGTYRY 103
               |   | | |   | |: :| ||    :| || | |             |||
Db     302 REGRGIKIDGNIGGGA-FINADMKENYGRLSLVKNDGKDILISGSNLSSAGFGA------ 354

Qy     104 NFINTPFYAKGKLGIAKTK--VDVTSRNATTYSNKSDKTSLAG---------GVGVGFKP 152
           | | ::  : : ::|  :|    :|  : : :    | |           | ||
Db     355 ----TQFISQASVSLRESKGQIDANIADAMGFGSANKGVVLGGYSSVSAYMSSAGSGFSS 410

Qy     153 LANVGVEASYNYLSEDANAISLGA 176
             :   | :  || :  ||||:: |
Db     411 GSGYSVGSGKNYSTGFANAIAISA 434


RESULT   3
US-09-545-199F-151
; Sequence 151, Application US/09545199F
; GENERAL INFORMATION:
;  APPLICANT: Lowery E., David
;  APPLICANT:  Fuller E., Troy
;  APPLICANT:  Kennedy J., Michael
;  TITLE OF INVENTION: Anti-Bacterial Vaccine Compositions
;  FILE REFERENCE: 28341/6227.NCP
;  CURRENT APPLICATION NUMBER: US/09/545,199F
;  CURRENT FILING DATE:  2000-04-06
;  PRIOR APPLICATION NUMBER: 60/153,453
;  PRIOR FILING DATE: 1999-09-10
;  PRIOR APPLICATION NUMBER: 60/128,689
;  PRIOR FILING DATE: 1999-04-09
;  NUMBER OF SEQ ID NOS: 165
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 151
;   LENGTH: 364
;   TYPE: PRT
;   ORGANISM: Actinobacillus pleuropneumoniae
US-09-545-199F-151


  Query Match             11.1%;  Score 101.5;  DB 5;  Length 364;
  Best Local Similarity   25.9%;  Pred. No. 0.018;
  Matches   51;  Conservative   25;  Mismatches   74;  Indels   47;  Gaps   11;

Qy      14 SLLAMSANAAISYGNSADAQP--YVGAKIG---------QVDAKQ---------INGKNT 53
           ||:|::  :| :   :|  |   | ||| |          |:|: :          ||  :
Db       4 SLVALTVLSAAAVAQAAPQQNTFYAGAKAGWASFHDGIEQLDSAKNTDRGTKYGINRNSV 63

Qy      54 AYGIYAGYNF--DQNFGVEAEFVGSD------AKEFNAGVSPVKGDVKSF--GAYGTYRY 103
              ||:: ||         |: || :| |         |   |    | | |:|   |:|
Db      64 TYGVFGGYQILNQDKLGLAAE-LGYDYFGRVRGSEKPNG----KADKKTFRHAAHGA--- 115

Qy     104 NFINTPFY-------AKGKLGIAKTKVDVTSRNATTYSNKSDK--TSLAGGVGVGFKPLA 154
               | |          ||:|||       : ||      |: :  :||  | || :  |
Db     116 TIALKPSYEVLPDLDVYGKVGIALVNNTYKTFNAAQEKVKTRRFQSSLILGAGVEYAILP 175

Qy     155 NVGVEASYNYLSEDANA 171
             :     | :|:    |
Db     176 ELAARVEYQWLNNAGKA 192


RESULT   4
US-09-904-101B-7
; Sequence 7, Application US/09904101B
; GENERAL INFORMATION:
;  APPLICANT: WHITE, PERRIN C.
;  APPLICANT:  MCMILLIAN, RANDY D.
;  TITLE OF INVENTION: HUMAN VERY LARGE G-PROTEIN COUPLED RECEPTOR (VLGR1)
;  FILE REFERENCE: UTSD:750US
;  CURRENT APPLICATION NUMBER: US/09/904,101B
;  CURRENT FILING DATE:  2002-07-01
;  PRIOR APPLICATION NUMBER: 60/227,952
;  PRIOR FILING DATE: 2000-08-25
;  NUMBER OF SEQ ID NOS: 333
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
;   LENGTH: 3971
;   TYPE: PRT
;   ORGANISM: Mus musculus
US-09-904-101B-7


  Query Match             11.1%;  Score 101.5;  DB 5;  Length 3971;
  Best Local Similarity   27.8%;  Pred. No. 0.39;
  Matches   44;  Conservative   21;  Mismatches   72;  Indels   21;  Gaps    7;

Qy      18 MSANAAISYGNSADAQPYVGAKIGQVDAKQINGKNTAYGIYAGYNFDQNFGVEAEFVGSD 77
           :| |  ::     |   |      :|  | ::| ||   : :||   :|  | |  |||
Db    3022 VSDNKDVATNRVTDGARY------KVGVKNVSGSNTV-SVRSGYGTAKNASVAANSVGSA 3074

Qy      78 AKEFNAGVSPVKGDVKSFGAYGTYRYNFINTPFYAKGKLGIAKTKVDVTSRNATTYSNK- 136
           | :  || | :          |||  :   |  || | :|   |   |  |     | :
Db    3075 AMD-KAGTSVM------VSRKGTYGRSVAWTTGYA-GSVGNMTTGSSVHGRKGVWTSGRA 3126

Qy     137 --SDKTSLAGGVGVGFKPLANVGVEASYNYLSEDANAI 172
             | ::| |||   |      :|| :| | :|:    :
Db    3127 VHSGRSSAAGGARSG---TTAMGVSSSRNTVSDATRCV 3161


RESULT   5
US-09-120-051C-9
; Sequence 9, Application US/09120051C
; GENERAL INFORMATION:
;  APPLICANT: Glisson, John Robert
;  APPLICANT:  Luo, Yugang
;  TITLE OF INVENTION: DNA encoding the outer membrane protein of Pasteurella multoci
;  FILE REFERENCE: 757.003US1
;  CURRENT APPLICATION NUMBER: US/09/120,051C
;  CURRENT FILING DATE:  1998-07-21
;  PRIOR APPLICATION NUMBER: US 60/067,957
;  PRIOR FILING DATE: 1997-12-08
;  NUMBER OF SEQ ID NOS: 58
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 9
;   LENGTH: 357
;   TYPE: PRT
;   ORGANISM: Haemophilus influenzae
US-09-120-051C-9
```

```
  Query Match            10.9%;  Score 99.5;  DB 5;  Length 357;
  Best Local Similarity   27.0%;  Pred. No. 0.029;
  Matches   51;  Conservative   27;  Mismatches   76;  Indels   35;  Gaps   10;

Qy       5 KTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQV---------DAKQING----K 51
           ||| |:   :  | :||||: | |    :  :| ::  :          | || :|    :
Db       3 KTLAALIVVAFAASAANAAVVYNNEG-TKVELGGRLTIIAEQSSNTLDDQKQQHGALRNQ 61

Qy      52 NTAYGIYAGYNFDQNF----GVEAEFVGSDAKEFNAGVSPVKGDVKSFGAYGT-YRYNFI 106
            : : | | :||   |     :|  |           ||  | :   | :  | | |  :
Db      62 GSRFHIKATHNFGDGFYAQGYLETRF----------VSKYKDNADHFDSITTKYAYVTL 110

Qy     107 NTPFYAKGKLGIAKTKVD-VTSRNATTYS--NKSDKTSLAGG-VGVGFKPLANVGVEASY 162
                : ||| |||  | :||     |   | |      |  ||  |: :  : : |:|
Db     111 GNKALGEVKLGRAKTIADGITSAEDKEYGVLNNSKYIPTNGNTVGYTFEGIDGLVLGANY 170

Qy     163 NYLSEDANA 171
             |::  ||
Db     171 -LLAQQRNA 178


RESULT   6
US-09-120-051D-9
; Sequence 9, Application US/09120051D
; GENERAL INFORMATION:
;  APPLICANT: Glisson, John Robert
;  APPLICANT:  Luo, Yugang
;  TITLE OF INVENTION: DNA encoding the outer membrane protein of Pasteurella multocida
;  FILE REFERENCE: 757.003US1
;  CURRENT APPLICATION NUMBER: US/09/120,051D
;  CURRENT FILING DATE:  1998-07-21
;  PRIOR APPLICATION NUMBER: US 60/067,957
;  PRIOR FILING DATE: 1997-12-08
;  NUMBER OF SEQ ID NOS: 61
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 9
;   LENGTH: 357
;   TYPE: PRT
;   ORGANISM: Haemophilus influenzae
US-09-120-051D-9


  Query Match            10.9%;  Score 99.5;  DB 5;  Length 357;
  Best Local Similarity   27.0%;  Pred. No. 0.029;
  Matches   51;  Conservative   27;  Mismatches   76;  Indels   35;  Gaps   10;

Qy       5 KTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQV---------DAKQING----K 51
           ||| |:   :  | :||||: | |    :  :| ::  :          | || :|    :
Db       3 KTLAALIVVAFAASAANAAVVYNNEG-TKVELGGRLTIIAEQSSNTLDDQKQQHGALRNQ 61

Qy      52 NTAYGIYAGYNFDQNF----GVEAEFVGSDAKEFNAGVSPVKGDVKSFGAYGT-YRYNFI 106
            : : | | :||   |     :|  |           ||  | :   | :  | | |  :
Db      62 GSRFHIKATHNFGDGFYAQGYLETRF----------VSKYKDNADHFDSITTKYAYVTL 110

Qy     107 NTPFYAKGKLGIAKTKVD-VTSRNATTYS--NKSDKTSLAGG-VGVGFKPLANVGVEASY 162
                : ||| |||  | :||     |   | |      |  ||  |: :  : : |:|
Db     111 GNKALGEVKLGRAKTIADGITSAEDKEYGVLNNSKYIPTNGNTVGYTFEGIDGLVLGANY 170

Qy     163 NYLSEDANA 171
             |::  ||
Db     171 -LLAQQRNA 178


RESULT   7
US-60-360-039-3134
; Sequence 3134, Application US/60360039
; GENERAL INFORMATION:
;  APPLICANT: Cao, Yongwei
;  APPLICANT:  Chen, Xianfeng
;  APPLICANT:  Goldman, Barry S.
;  APPLICANT:  Hinkle, Gregory J.
;  APPLICANT:  Slater, Steven C.
;  TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
;  TITLE OF INVENTION:  PLANTS WITH IMPROVED PROPERTIES
;  FILE REFERENCE: 38-10(52052)A
;  CURRENT APPLICATION NUMBER: US/60/360,039
;  CURRENT FILING DATE:  2002-02-21
;  NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 3134
;   LENGTH: 1265
;   TYPE: PRT
;   ORGANISM: Neurospora crassa
US-60-360-039-3134


  Query Match            10.7%;  Score 97.5;  DB 7;  Length 1265;
  Best Local Similarity   25.2%;  Pred. No. 0.24;
  Matches   33;  Conservative   23;  Mismatches   44;  Indels   31;  Gaps    5;

Qy      67 FGVEAEFVGSDAKEFNAGVS--------------PVKGDV------KSFGAYGTYRYNF- 105
           | :   : |::  :   ||:                ::||:       :|   ||  :||
Db     728 FDIVPTYSGNEKNKVGRGVALLSSVRPTVGTKRMNLQGDISVPIMGSNFEVIGTVNFNFL 787

Qy     106 INTPFYAKGKLGIAKTKVDVTSRNATTYSNKSDKTSLAGGVGVGFKPLANVGVEASYNYL 165
           : |||        :  |::|||:   ||  | | | : |  |:|   :|| ::   | :
Db     788 VITPF--------SHPKMEVTSQQ--TYWKKLDSTMVIGHRGLGKNVVANKSLQLGENTI 837

Qy     166 SEDANAISLGA 176
                | :|||
Db     838 PSFIAAANLGA 848


RESULT   8
US-09-410-835C-3
; Sequence 3, Application US/09410835C
; GENERAL INFORMATION:
;  APPLICANT: Covacci, Antonello
;  APPLICANT:  Bugnoli, Massimo
;  APPLICANT:  Telford, John
;  APPLICANT:  Macchia, Giovanni
;  APPLICANT:  Rappuoli, Rino
;  TITLE OF INVENTION: Helicobacter Pylori CAI Antigen Polynucleotides
;  FILE REFERENCE: CHIR0213
;  CURRENT APPLICATION NUMBER: US/09/410,835C
;  CURRENT FILING DATE:  2002-06-13
;  PRIOR APPLICATION NUMBER: 08/471,491
;  PRIOR FILING DATE: 1995-06-06
;  PRIOR APPLICATION NUMBER: 08/256,848
;  PRIOR FILING DATE: 1994-10-21
;  NUMBER OF SEQ ID NOS: 24
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
;   LENGTH: 1296
;   TYPE: PRT
;   ORGANISM: Helicobacter pylori
US-09-410-835C-3


  Query Match             9.9%;  Score 90;  DB 5;  Length 1296;
  Best Local Similarity   27.2%;  Pred. No. 1.5;
  Matches   47;  Conservative   20;  Mismatches   54;  Indels   52;  Gaps   10;

Qy       9 AVSASSLLAMSANAAISYGNSADAQPYVGAKIGQVDAKQINGKNTAYGIYAGYNFDQNFG 68
           |:  :| |   :||:: || ||    |:    |||:|  | |   :|| |: :|
Db    1034 AIGGTS-LNNGSNASL-YGTSAGVDAYLN---GQVEA--IVGGFGSYG-YSSFN------ 1079

Qy      69 VEAEFVGSDAKEFNAGVSPVKGDVKSFGAYGTYRYNFINTPFYAKGKLGIAKTKVDVTSR 128
                : |   |:| :      :|| |     |     | |:| ||
Db    1080 -------NRANSLNSGANNT-----NFGVYSRIFANQHEFDFEAQGALG---------- 1116

Qy     129 NATTYSNKSDKTSLAGGVGVGFKPLANVGVEASYNYLS-EDANAISLGAHLAF 180
                  ||::||      ||      :  ||:||:   |   | |  ||
Db    1117 --------SDQSSL------NFKSALLQDLNQSYHYLAYSAATRASYGYDFAF 1155


RESULT   9
```

```
US-09-684-883-2
; Sequence 2, Application US/09684883
;   GENERAL INFORMATION:
;        APPLICANT: Brodeur, Bernard R
;                   Martin, Denis
;                   Hamel, Josee
;                   Rioux, Clement
;        TITLE OF INVENTION: PROTEINASE K RESISTANT SURFACE PROTEIN
;                            OF NEISSERIA MENINGITIDIS
;        NUMBER OF SEQUENCES: 30
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Foley & Lardner
;             STREET: 3000 K Street, N.W., Suite 500
;             CITY: Washington
;             STATE: D.C.
;             COUNTRY: USA
;             ZIP: 20007-5109
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/684,883
;             FILING DATE: 06-Oct-2000
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/08/913,362
;             FILING DATE: 13-NOV-1997
;             APPLICATION NUMBER: US 08/406,362
;             FILING DATE: 17-MAR-1995
;             APPLICATION NUMBER: US 60/001,983
;             FILING DATE: 04-AUG-1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Bent, Stephen A.
;             REGISTRATION NUMBER: 29,768
;             REFERENCE/DOCKET NUMBER: 047998/0128
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: (202)672-5300
;             TELEFAX: (202)672-5399
;             TELEX: 904136
;   INFORMATION FOR SEQ ID NO: 2:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 174 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        MOLECULE TYPE: protein
;        SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-684-883-2


  Query Match             9.7%;  Score 88.5;  DB 5;  Length 174;
  Best Local Similarity   26.7%;  Pred. No. 0.16;
  Matches   52;  Conservative   29;  Mismatches   75;  Indels   39;  Gaps   13;

Qy       2 KTLKTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQVDAKQINGKNTAYG--IYA 59
           | | ||:|      ||: | ||:: | |     || |      |    |    :   | |
Db       3 KALATLIA------LALPA-AALAEGASGF---YVQADAAHAKASSSLGSAKGFSPRISA 52

Qy      60 GYNF-DQNFGVEAEFVGSDAKEFNAGVSPVKGDVKSFGAYGTYRYNFINTPF--YAKGKL 116
           ||   |  | |:     :  | : |  :  |  : | ||   | ::   :|   |   :|
Db      53 GYRINDLRFAVDY----TRYKNYKAPSTDFK--LYSIGASAIYDFD-TQSPVKPYLGARL 105

Qy     117 GIAKTKVDVTSRNATTYSNKSDKTSLAGGV--GVGFKPLANVGVEAS--YNYLSE----- 167
            : :  ||:        |:   :||:  ||  || :    || ::|   |||: :
Db     106 SLNRASVDLGG------SDSFSQTSIGLGVLTGVSYAVTPNVDLDAGYRYNYIGKVNTVK 159

Qy     168 --DANAISLGAHLAF 180
             :  :|:|  : |
Db     160 NVRSGELSVGVRVKF 174


RESULT  10
US-09-540-209B-6145
; Sequence 6145, Application US/09540209B
; GENERAL INFORMATION:
;  APPLICANT: Gary L. Breton
;  TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO BACTEROIDES
;  TITLE OF INVENTION:  FOR DIAGNOSTICS AND THERAPEUTICS
;  FILE REFERENCE: 2709.1001-001
;  CURRENT APPLICATION NUMBER: US/09/540,209B
;  CURRENT FILING DATE:  2000-04-04
;  NUMBER OF SEQ ID NOS: 10444
; SEQ ID NO 6145
;   LENGTH: 427
;   TYPE: PRT
;   ORGANISM: B.fragilis
US-09-540-209B-6145


  Query Match             9.5%;  Score 86.5;  DB 5;  Length 427;
  Best Local Similarity   25.4%;  Pred. No. 0.82;
  Matches   48;  Conservative   22;  Mismatches   78;  Indels   41;  Gaps    8;

Qy       5 KTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQV-DAKQINGK---NTAYGIYAG 60
             :|| |:  : ||      ||:  |:    ||     ||: |    | |     |||:  |
Db       9 QTLCALLLTILL---PGVAIAQNNT--NSPYTRYGYGQLADQSFANSKAMGGIAYGLRDG 63

Qy      61 ----------------YNFDQNFGVEAEFVGSDAKEFNAGVSPVKGDVKSFGAYGTYR 102
                            : ||  | ::     |:  : ||  |       |  :
Db      64 SHINPLNPASYTAIDSLTFLFDGGFSMQNTNFSSEGTKLNAKNSSFDYIAMQFRLHQRVA 123

Qy     103 YNFINTPFYAKGKLGIAKTKVDVTSRNATTYSNKSDKTSLAGG-------VGVGFKPLAN 155
           :    |: : |   :||   || |  | :       || ||        ||:| | | |
Db     124 MSIGLLPYSSVG-YNMAKANNDVASEEARSV------TSFAGDGGLHQLYVGLGVKVLKN 176

Qy     156 VGVEASYNY 164
           : | |: :|
Db     177 LSVGANVSY 185


RESULT  11
US-09-684-883-6
; Sequence 6, Application US/09684883
;   GENERAL INFORMATION:
;        APPLICANT: Brodeur, Bernard R
;                   Martin, Denis
;                   Hamel, Josee
;                   Rioux, Clement
;        TITLE OF INVENTION: PROTEINASE K RESISTANT SURFACE PROTEIN
;                            OF NEISSERIA MENINGITIDIS
;        NUMBER OF SEQUENCES: 30
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Foley & Lardner
;             STREET: 3000 K Street, N.W., Suite 500
;             CITY: Washington
;             STATE: D.C.
;             COUNTRY: USA
;             ZIP: 20007-5109
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/684,883
;             FILING DATE: 06-Oct-2000
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/08/913,362
;             FILING DATE: 13-NOV-1997
;             APPLICATION NUMBER: US 08/406,362
;             FILING DATE: 17-MAR-1995
;             APPLICATION NUMBER: US 60/001,983
;             FILING DATE: 04-AUG-1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Bent, Stephen A.
;             REGISTRATION NUMBER: 29,768
```

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;            REFERENCE/DOCKET NUMBER: 047998/0128
;          TELECOMMUNICATION INFORMATION:
;            TELEPHONE: (202)672-5300
;            TELEFAX: (202)672-5399
;            TELEX: 904136
;     INFORMATION FOR SEQ ID NO: 6:
;          SEQUENCE CHARACTERISTICS:
;            LENGTH: 174 amino acids
;            TYPE: amino acid
;            TOPOLOGY: linear
;          MOLECULE TYPE: protein
;          SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-09-684-883-6


  Query Match             9.2%;  Score 84;  DB 5;  Length 174;
  Best Local Similarity   28.2%;  Pred. No. 0.47;
  Matches   48;  Conservative   22;  Mismatches   70;  Indels   30;  Gaps   11;

Qy       2 KTLKTLLAVSASSLLAMSANAAISYGNSADAQPYVGAKIGQVDAKQINGKNTAYG--IYA 59
           | | ||:|      ||: | ||:: | |     || |     |    :   | |
Db       3 KALATLIA------LALPA-AALAEGASGF---YVQADAAHAKASSSLGSAKGFSPRISA 52

Qy      60 GYNF-DQNFGVEAEFVGSDAKEFNAGVSPVKGDVKSFGAYGTYRYNFINTPF--YAKGKL 116
             ||   |  | |:     :  | : |  :  |  : | ||   | ::   :|   |   :|
Db      53 GYRINDLRFAVDY----TRYKNYKAPSTDFK--LYSIGASAIYDFD-TQSPVKPYLGARL 105

Qy     117 GIAKTKVDVTSRNATTYSNKSDKTSLAGGV--GVGFKPLANVGVEASYNY 164
           : :  ||:        |:   :||   ||  || :    || ::| | |
Db     106 SLNRASVDLGG------SDSFSQTSTGLGVLAGVSYAVTPNVDLDAGYRY 149


RESULT  12
US-10-175-275-4
; Sequence 4, Application US/10175275
; GENERAL INFORMATION:
;  APPLICANT: SASAKI, Ken
;  APPLICANT:  HARKNESS, Robin E.
;  APPLICANT:  LOOSMORE, Sheena M.
;  APPLICANT:  CHONG, Pele
;  APPLICANT:  KLEIN, Michel H.
;  TITLE OF INVENTION: HIGH MOLECULAR WEIGHT MAJOR OUTER MEMBRANE PROTEIN OF
;  TITLE OF INVENTION:  MORAXELLA
;  FILE REFERENCE: 1038-1235 MIS
;  CURRENT APPLICATION NUMBER: US/10/175,275
;  CURRENT FILING DATE:  2002-06-20
;  PRIOR APPLICATION NUMBER: 08/945,567
;  PRIOR FILING DATE: 1998-03-19
;  PRIOR APPLICATION NUMBER: 08/431,718
;  PRIOR FILING DATE: 1995-05-01
;  PRIOR APPLICATION NUMBER: 08/478,370
;  PRIOR FILING DATE: 1995-06-07
;  PRIOR APPLICATION NUMBER: 08/621,944
;  PRIOR FILING DATE: 1996-03-26
;  PRIOR APPLICATION NUMBER: PCT/CA96/00264
;  PRIOR FILING DATE: 1996-04-29
;  NUMBER OF SEQ ID NOS: 10
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
;   LENGTH: 1833
;   TYPE: PRT
;   ORGANISM: Moraxella catarrhalis
US-10-175-275-4


  Query Match             9.1%;  Score 83;  DB 6;  Length 1833;
  Best Local Similarity   25.2%;  Pred. No. 12;
  Matches   37;  Conservative   23;  Mismatches   55;  Indels   32;  Gaps    7;

Qy      60 GYNFDQNFGVEAEFVGS-DAKEF---NAGVSPVKGDVKSFGAYGTYRYNFINTPFYAKG- 114
           |:|   |     :|| : |  :|   ||  : | |  : :   |  |  :|  :  |
Db     618 GFNLKNN-NNPIDFVSTYDIVDFANGNATTATVTHDTANKTSKVVYDVNVDDTTIHLTGT 676

Qy     115 ----KLGIAKTKVDVTSRNATTYS----NKSDKTSLAGGVGVG-----------FKPLA 154
               |||:  ||:: || |  | :    | ||: :|     :              |  |
Db     677 DDNKKLGVKTTKLNKTSANGNTATNFNVNSSDEDALVNAKDIAENLNTLAKEIHTTKGTA 736

Qy     155 NVGVE------ASYNYLSEDANAISLG 175
           :  ::         |  ::|||||::|
Db     737 DTALQTFTVKKVDENNNADDANAITVG 763


RESULT  13
US-10-175-282-4
; Sequence 4, Application US/10175282
; GENERAL INFORMATION:
;  APPLICANT: SASAKI, Ken
;  APPLICANT:  HARKNESS, Robin E.
;  APPLICANT:  LOOSMORE, Sheena M.
;  APPLICANT:  CHONG, Pele
;  APPLICANT:  KLEIN, Michel H.
;  TITLE OF INVENTION: HIGH MOLECULAR WEIGHT MAJOR OUTER MEMBRANE PROTEIN OF
;  TITLE OF INVENTION:  MORAXELLA
;  FILE REFERENCE: 1038-1234 MIS
;  CURRENT APPLICATION NUMBER: US/10/175,282
;  CURRENT FILING DATE:  2002-06-20
;  PRIOR APPLICATION NUMBER: 08/945,567
;  PRIOR FILING DATE: 1998-03-19
;  PRIOR APPLICATION NUMBER: 08/431,718
;  PRIOR FILING DATE: 1995-05-01
;  PRIOR APPLICATION NUMBER: 08/478,370
;  PRIOR FILING DATE: 1995-06-07
;  PRIOR APPLICATION NUMBER: 08/621,944
;  PRIOR FILING DATE: 1996-03-26
;  PRIOR APPLICATION NUMBER: PCT/CA96/00264
;  PRIOR FILING DATE: 1996-04-29
;  NUMBER OF SEQ ID NOS: 10
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
;   LENGTH: 1833
;   TYPE: PRT
;   ORGANISM: Moraxella catarrhalis
US-10-175-282-4


  Query Match             9.1%;  Score 83;  DB 6;  Length 1833;
  Best Local Similarity   25.2%;  Pred. No. 12;
  Matches   37;  Conservative   23;  Mismatches   55;  Indels   32;  Gaps    7;

Qy      60 GYNFDQNFGVEAEFVGS-DAKEF---NAGVSPVKGDVKSFGAYGTYRYNFINTPFYAKG- 114
           |:|   |     :|| : |  :|   ||  : | |  : :   |  |  :|  :  |
Db     618 GFNLKNN-NNPIDFVSTYDIVDFANGNATTATVTHDTANKTSKVVYDVNVDDTTIHLTGT 676

Qy     115 ----KLGIAKTKVDVTSRNATTYS----NKSDKTSLAGGVGVG-----------FKPLA 154
               |||:  ||:: || |  | :    | ||: :|     :              |  |
Db     677 DDNKKLGVKTTKLNKTSANGNTATNFNVNSSDEDALVNAKDIAENLNTLAKEIHTTKGTA 736

Qy     155 NVGVE------ASYNYLSEDANAISLG 175
           :  ::         |  ::|||||::|
Db     737 DTALQTFTVKKVDENNNADDANAITVG 763


RESULT  14
US-10-031-165-3
; Sequence 3, Application US/10031165
; GENERAL INFORMATION:
;  APPLICANT: LOOSMORE, Sheena M.
;  APPLICANT:  SASAKI, Ken
;  APPLICANT:  YANG, Yan-Ping
;  APPLICANT:  KLEIN, Michel H.
;  TITLE OF INVENTION: RECOMBINANT HIGH MOLECULAR WEIGHT MAJOR OUTER MEMBRANE
;  TITLE OF INVENTION:  PROTEIN OF MORAXELLA
;  FILE REFERENCE: 1038-1217 MIS
;  CURRENT APPLICATION NUMBER: US/10/031,165
;  CURRENT FILING DATE:  2002-05-15
;  PRIOR APPLICATION NUMBER: 09/361,619
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;  PRIOR FILING DATE: 1999-07-27
;  PRIOR APPLICATION NUMBER: PCT/CA00/00870
;  PRIOR FILING DATE: 2000-07-26
;  NUMBER OF SEQ ID NOS: 48
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
;   LENGTH: 1992
;   TYPE: PRT
;   ORGANISM: Moraxella catarrhalis
US-10-031-165-3


  Query Match             9.1%;  Score 83;  DB 6;  Length 1992;
  Best Local Similarity   25.2%;  Pred. No. 14;
  Matches   37;  Conservative   23;  Mismatches   55;  Indels   32;  Gaps    7;

Qy      60 GYNFDQNFGVEAEFVGS-DAKEF---NAGVSPVKGDVKSFGAYGTYRYNFINTPFYAKG- 114
           |:|   |     :|| : |  :|   ||  : |  |  :  :   |  |  :|  :  |
Db     777 GFNLKNN-NNPIDFVSTYDIVDFANGNATTATVTHDTANKTSKVVYDVNVDDTTIHLTGT 835

Qy     115 ----KLGIAKTKVDVTSRNATTYS----NKSDKTSLAGGVGVG-----------FKPLA 154
               |||:  ||:: || |  | :    | ||: :|     :               |  |
Db     836 DDNKKLGVKTTKLNKTSANGNTATNFNVNSSDEDALVNAKDIAENLNTLAKEIHTTKGTA 895

Qy     155 NVGVE------ASYNYLSEDANAISLG 175
           :  ::         |  ::|||||::|
Db     896 DTALQTFTVKKVDENNNADDANAITVG 922


RESULT  15
US-10-031-165-13
; Sequence 13, Application US/10031165
; GENERAL INFORMATION:
;  APPLICANT: LOOSMORE, Sheena M.
;  APPLICANT:  SASAKI, Ken
;  APPLICANT:  YANG, Yan-Ping
;  APPLICANT:  KLEIN, Michel H.
;  TITLE OF INVENTION: RECOMBINANT HIGH MOLECULAR WEIGHT MAJOR OUTER MEMBRANE
;  TITLE OF INVENTION:  PROTEIN OF MORAXELLA
;  FILE REFERENCE: 1038-1217 MIS
;  CURRENT APPLICATION NUMBER: US/10/031,165
;  CURRENT FILING DATE:  2002-05-15
;  PRIOR APPLICATION NUMBER: 09/361,619
;  PRIOR FILING DATE: 1999-07-27
;  PRIOR APPLICATION NUMBER: PCT/CA00/00870
;  PRIOR FILING DATE: 2000-07-26
;  NUMBER OF SEQ ID NOS: 48
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 13
;   LENGTH: 1992
;   TYPE: PRT
;   ORGANISM: Moraxella catarrhalis
US-10-031-165-13


  Query Match             9.1%;  Score 83;  DB 6;  Length 1992;
  Best Local Similarity   25.2%;  Pred. No. 14;
  Matches   37;  Conservative   23;  Mismatches   55;  Indels   32;  Gaps    7;

Qy      60 GYNFDQNFGVEAEFVGS-DAKEF---NAGVSPVKGDVKSFGAYGTYRYNFINTPFYAKG- 114
           |:|   |     :|| : |  :|   ||  : |  |  :  :   |  |  :|  :  |
Db     777 GFNLKNN-NNPIDFVSTYDIVDFANGNATTATVTHDTANKTSKVVYDVNVDDTTIHLTGT 835

Qy     115 ----KLGIAKTKVDVTSRNATTYS----NKSDKTSLAGGVGVG-----------FKPLA 154
               |||:  ||:: || |  | :    | ||: :|     :               |  |
Db     836 DDNKKLGVKTTKLNKTSANGNTATNFNVNSSDEDALVNAKDIAENLNTLAKEIHTTKGTA 895

Qy     155 NVGVE------ASYNYLSEDANAISLG 175
           :  ::         |  ::|||||::|
Db     896 DTALQTFTVKKVDENNNADDANAITVG 922
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Job time: 78 sec